Wireless Pocket 2D Imager Scanner

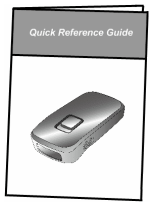
- MS920 -

User Manual

Table of Contents

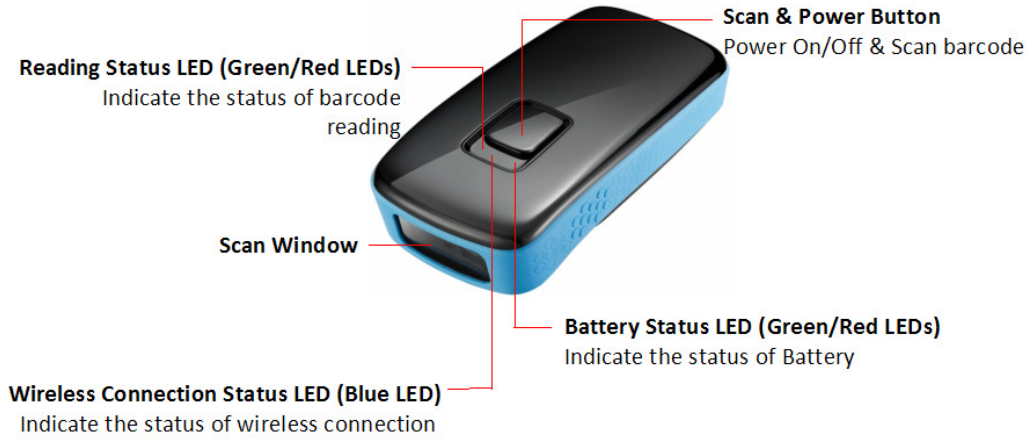
1. Package Contents

Please make sure the following contents are in the MS920 carton. If something is missing or damaged, please contact your Unitech representative.

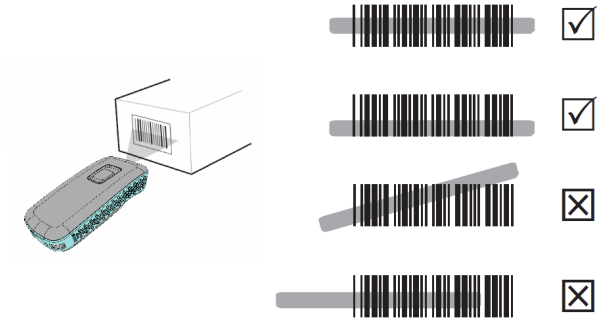
		
MS912 scanner	Resource CD	Quick Guide
		
USB Charging Cable	Hand Strap	Battery

Note:
1. The scanner's default power off (idle mode) time is 3 minutes.
2. Please charge scanner for at least 2 hours prior to initial use.

2. Scanner Detail

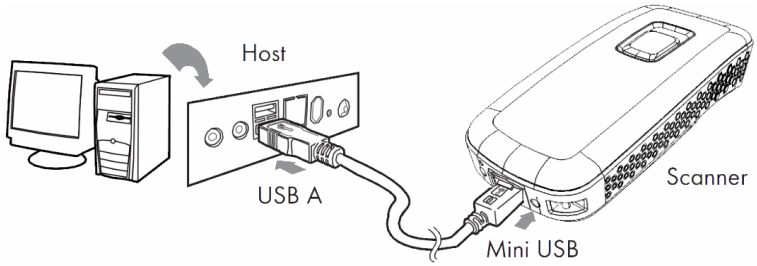


3. Getting Started



To scan a barcode, make sure the aiming beam crosses every bar and space of the barcode.

BATTERY CHARGING



1. Flip up the rubber cover to expose the mini USB port on the scanner.
2. Insert the mini USB connector into the port on the scanner and the standard USB connector of the USB cable into a USB port on the host PC.

Pairing With PC/Notebook For The First Time

PC (HID mode)

Following steps are based on Microsoft Windows 7.

1. Use MS920 to scan barcode “HID”.
2. Open **Devices and Printers** by clicking the **Start** button , and then, on the **Start** menu, clicking **Devices and Printers**.
3. Click **Add a device**, and then follow the instructions.
4. Click the Bluetooth enabled device (**Unitech BT XXXXXX**) you want to add to your computer, and then click **Next**. If you don't see the device you want to add, make sure the device is turned on and discoverable. If you just turned on the device, it may take Windows several seconds to detect it.

For Bluetooth 2.0 (or lower) pairing, you have to use MS 920 to scan function barcodes and numerical “Bluetooth Pincode” according to the direction shown on the screen of the PC the MS 920 is pairing to during the pairing procedure. Numerical barcodes and other function barcodes for Bluetooth Pincode entry are listed on the reverse side of this sheet.

PC (SPP mode)

Following steps are based on Microsoft Windows 7.

1. Use MS920 t0 scan barcode “SPP”.
2. Open **Devices and Printers** by clicking the **Start** button  , and then, on the **Start** menu, clicking **Devices and Printers**.
3. Click **Add a device**, and then click the **Unitech BT XXXXXX** icon.
4. You can choose two from three options listed under **Select a pairing option**:

   Enter the device’s pairing code:
   Click this item and then enter pairing code “0000” in the next screen..

   Pair without pairing code:
   Click this item, and the pairing procedure will complete automatically, but you still need to enter pairing code when tools such as HyperTerminal launches.

Switching Between HID and SPP Mode

From SPP to HID

If your MS920 is on SPP mode:
1. Go to Devices and Printers under Control Panel, remove the MS920.
2. Use MS920 to scan the barcode “HID”.
3. Undertake the procedure of searching new device, and then select device (Unitech BT XXXXXX) and make pairing.

From HID to SPP

If your MS920 is on SPP mode:
1. Scan the barcode “BT Un-pair”.
2. Scan the barcode “SPP”.
3. Undertake the procedure of searching new device, and then select MS920 and make pairing.
4. Luanch HyperTerminal or Tera Term to make pairing.

iOS Device

1. From the Home screen, choose Settings > Bluetooth and turn Bluetooth on.
2. Choose Unitech BT XXXXXX, and then enter pairing code “0000” if prompted.

Android Device

1. From the Home screen, choose Settings and goes to configurations for Bluetooth and turn Bluetooth on.
2. Choose Unitech BT XXXXXX, and then enter pairing code “0000” if prompted.

Buffer Erasing

Under Inventory Mode

1. Scan (Erase Inventory Buffer) 

.

2. Scan (Erase) 

Under Batch Mode

1. Scan (Erase Batch Buffer) 

.

2. Scan (Erase) 

For detail information about barcodes, please refers to section 5. Appendix - Bar Code Configuration And Commands.

4. Specifications

Specifications

Light source	Illumination: Highly visible white LED Aiming : 617 nm red LED
Scan rate	240 scans/sec
Sensor	Linear CMOS sensor
Resolution	1D codes 0.1 mm (4 mils) 2D codes 0.167 mm (6.6 mils)
PCS	30%
Housing	Plastic (ABS)
Profile	SPP, HID
Working Hours	Over 13 hours (1 scan/3 seconds)
Charge Time	Fully charged in 4 hours
Coverage	300 ft(90m),class 1
Operating Temp	0 to 50℃ (32℉ to 122℉)
Symbologies	1D: EAN/UPC, GS1 Databar (limited expanded & omni-directional), Code 39, Code 128, UCC/EAN 128, ISBN, ISBT, Interleaved/Matrix/ Industrial and Standard 2 of 5, Codabar, Code 93/93i, Code 11, MSI, Plessey, Telepen, 2D: Data Matrix, PDF417, Micro PDF 417, Codablock, Maxicode, QR, AztecPostal: Australian Post, BPO, Canada Post, Dutch Post, Japan Post, PostNet, Sweden Post

5. Appendix - Bar Code Configuration And Commands

BASIC SETUP BARCODE

Interface Mode

HID Mode

SPP

BT Unpair

Factory Default Settings

Display F/W Version

Letter case (HID mode)

Auto Trace

Lowercase

Uppercase

Buffer Mode Settings

No Buffer

Inventory

Auto Batch

Buffer Operation

Inventory Send

Available for Inventory

Erase Previous Entry

Erase Inventory Buffer

Erase Batch Buffer

Erase

Barcode for Bluetooth Pairing

Start Bluetooth Pairing

Enter (finish your entry)

Abort (cancel your entry)

0

1

2

3

4

5

6

7

8

9

Resets all parameters

- Resets all configuration parameters to their default values except for locked parameters.

Reset factory defaults

<CCMD>4006

Interface

• Keyboard settings

- Keyboard settings only apply when using a the following interfaces:
  - USB Keyboard HID
  - Keyboard Wedge
  - HID Keyboard Bluetooth device profile

•Selection

- Select the keyboard for your application.
- Keyboard settings only apply when using a the following interfaces:
  - USB Keyboard HID
  - Keyboard Wedge
  - HID Keyboard Bluetooth device profile

Keyboard settings - Selection - North America (*)

<SW>674000

Keyboard settings - Selection - French Windows

<SW>674001

Keyboard settings - Selection - German Windows

<SW>674002

Keyboard settings - Selection - French Canadian Windows 95/98

<SW>674003

Keyboard settings - Selection - French Canadian Windows XP/2000

<SW>674004

Keyboard settings - Selection - Spanish Windows

<SW>674005

Keyboard settings - Selection - Italian Windows

<SW>674006

Keyboard settings - Selection - Swedish Windows

<SW>674007

Keyboard settings - Selection - UK English Windows

<SW>674008

Keyboard settings - Selection - Japanese Windows

<SW>674009

Keyboard settings - Selection - Brazilian Portuguese Windows

<SW>67400A

Keyboard settings - Selection - IBM / NCR Terminals

<SW>67400B

Keyboard settings - Selection - Czech QWERTY

<SW>67400C

Keyboard settings - Selection - Slovakian QWERTY

<SW>67400D

Keyboard settings - Selection - Hungarian 101-key

<SW>67400E

Keyboard settings - Selection - Swiss German

<SW>67400F

Keyboard settings - Selection - Swiss French

<SW>674010

Keyboard settings - Selection - Danish

<SW>674011

Keyboard settings - Selection - Norwegian

<SW>674012

Keyboard settings - Selection - Hungarian

<SW>674013

Keyboard settings - Selection - Norwegian

<SW>674012

Keyboard settings - Selection - Dutch

<SW>674014

Keyboard settings - Selection - Portuguese

<SW>674015

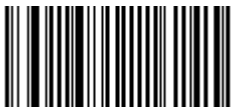
Keyboard settings - Selection - Belgian French

<SW>674016

• Extended ASCLL

- Keyboard settings only apply when using a the following interfaces:
  - USB Keyboard HID
  - Keyboard Wedge
  - HID Keyboard Bluetooth device profile

Keyboard settings - Extended ASCII - Send codes w/chars mapped to Windows-1252 (*)



<SW>674201

Keyboard settings - Extended ASCII - Send codes w/chars ignored

<SW>674202

Keyboard settings - Extended ASCII - Do not send codes w/ext ASCII chars

<SW>674203

- **special keys transmission**

- Only for use with a USB or keyboard wedge cable.
- Only symbologies that support the full ASCII character set allow the encoding of special keyboard keys such as [Return] and [Tab].
- No symbologies support the encoding of other functions keys such as [PF1]

and [PageDown].
- The special keys transmission settings allow you to transmit special keyboard combinations ([Ctrl] + char or [Alt] + char) as a single keyboard character.

• **Alt mode**

- Keyboard settings only apply when using a the following interfaces:
  - USB Keyboard HID
  - Keyboard Wedge
  - HID Keyboard Bluetooth device profile
- Emulates PC AT keyboard [[Alt] + decimal_sequence] function (for bar codes containing ASCII characters not on your keyboard).

Keyboard settings - Special keys transmission - Alt mode - Disable (*)

<SW>674300

Keyboard settings - Special keys transmission - Alt mode - Enable

<SW>674301

• **CAPS / NUM lock state**

- Only applies to Keyboard wedge (PS2) interface.
- Use this setting to set the CAPS / NUM lock state.
- The autodetect option allows the scanner to automatically detect the state of the CAPS and NUM lock.

Keyboard settings - CAPS / NUM state - Autodetect (*)

<SW>674500

Keyboard settings - CAPS / NUM state - CAPS and NUM = OFF

<SW>674501

Keyboard settings - CAPS / NUM state - CAPS = OFF / NUM = ON

<SW>674502

Keyboard settings - CAPS / NUM state - CAPS = ON / NUM = OFF

<SW>674503

Keyboard settings - CAPS / NUM state - CAPS and NUM = ON

<SW>674504

Data Transmission Settings

- Modify data transmission settings to optimize performance.

• ISCP

- Intermec Scanner Control Protocol parameters

ISCP - ISCP (*)

<SW>614001

Sending this parameter during online setup will lose the connection (click "Connect" to reestablish the connection).

ISCP - None

<SW>614000

• Data format

- Barcode data is sent without a frame and no acknowledgement is necessary.

ISCP - Data format - Raw format (*)

<SW>734000

- Data is sent to the host in an ISCP frame.

ISCP - Data format - Packet format

<SW>734001

• Extended barcode data format

- "Packet" data format must be activated to enable BCD transmission.
- Precedes barcode data with "[BCD]" indicator.

ISCP - Data format - Extended barcode data format - BCD

<SW>734E00

- "Packet" data format must be activated to enable BCDEX transmission.
- Precedes barcode data with "[BCDEX]" indicator and extended information: [BCDEX2]01 0001 0000 0000 000D 0002 0005 (+ barcode data etc.)

ISCP - Data format - Extended barcode data format - BCDEX (*)

<SW>734E01

ISCP - Data format - Extended barcode data format - DPS

<SW>734E02

• Transmission frame size (TFS)

- Length of the longest frame that can be received by the host.
- Value from 32 up to the maximum transmission frame size (MTFS) of the scanner.

ISCP - Transmission frame size (TFS) - 2048 (*)

<SW>73800800

Event notification

- When active, the scanner notifies the host when certain events take place.
- Only available when data format is set to packet format.
- For information on the event frames that the host will receive from the scanner see the ISCP online help available in the help menu in Easyset.

• ISCP bar code

- When active the scanner informs the host of the following information after reading and processing an ISCP bar code:
  - Error (if any)
  - Type of ISCP bar code (setup, status, etc.)
  - GID
  - FID
  - Parameter
- For information on the event frame received by the host see the ISCP online help available in the help menu in Easyset.

ISCP - Event notification - ISCP bar code - Enable (*)

<SW>734301

ISCP - Event notification - ISCP bar code - Disable

<SW>734300

• Preprocessing ISCP bar code

- When active the scanner informs the host of the following information after reading but BEFORE processing an ISCP bar code:
  - GID
  - FID
  - Parameter
- For information on the event frame received by the host see the ISCP online help available in the help menu in Easyset.

ISCP - Event notification - Preprocessing ISCP bar code - Disable (*)

<SW>734400

ISCP - Event notification - Preprocessing ISCP bar code - Enable

<SW>734401

• Unsuccessful decoding

- This event is sent whenever a decode session is deactivated (trigger released) and no decode has taken place.

ISCP - Event notification - Unsuccessful decoding - Disable (*)

<SW>734600

ISCP - Event notification - Unsuccessful decoding - Enable

<SW>734601

• Start of read session

ISCP - Event notification - Start of read session - Disable (*)

<SW>734700

ISCP - Event notification - Start of read session - Enable

<SW>734701

• End of read session

ISCP - Event notification - End of read session - Disable (*)

<SW>734800

ISCP - Event notification - End of read session - Enable

<SW>734801

• Start-up

ISCP - Event notification - Start-up - Disable (*)

<SW>734900

ISCP - Event notification - Start-up - Enable

<SW>734901

• Trigger pulled

ISCP - Event notification - Trigger pulled - Disable (*)

<SW>734A00

ISCP - Event notification - Trigger pulled - Enable

<SW>734A01

• Trigger released

ISCP - Event notification - Trigger released - Disable (*)

<SW>734B00

ISCP - Event notification - Trigger released - Enable

<SW>734B01

• Wake-up

ISCP - Event notification - Wake-up - Disable (*)

<SW>734500

ISCP - Event notification - Wake-up - Enable

<SW>734501

ISCP - Event notification - Structured append - Disable (*)

<SW>735000

ISCP - Event notification - Structured append - Enable

<SW>735001

• Symbology identifier

Symbology identifier - Not transmitted (*)

<SW>604000

Symbology identifier - AIM format

<SW>604002

Symbology identifier - User Defined Identifier

<SW>604003

Symbology identifier - Code mark

<SW>604001

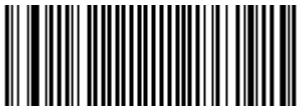
• Preamble

Preamble - None (*)

<SW>60C00000

• Postamble

Postamble - Carriage Return + Line Feed (*)



<SW>60C100020D0A

Postamble - None

<SW>60C10000

• Inter-character/message delay

- Avoids dropping characters if transmitting decoded data too fast for the host system

• Inter-character delay

Inter-character/message delay - Inter-character delay - 0 (*)

<SW>60800000

Inter-character/message delay - Inter-character delay - 10

<SW>6080000A

Inter-character/message delay - Inter-character delay - 20

<SW>60800014

Inter-character/message delay - Inter-character delay - 30

<SW>6080001E

Inter-character/message delay - Inter-character delay - 40

<SW>60800028

Inter-character/message delay - Inter-character delay - 50

<SW>60800032

• Inter- message delay

- Value is in milliseconds.

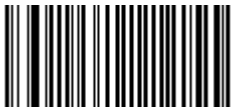
Inter-character/message delay - Inter-message delay - 0 (*)

<SW>60810000

Inter-character/message delay - Inter-message delay - 10

<SW>6081000A

Inter-character/message delay - Inter-message delay - 30



<SW>6081001E

Inter-character/message delay - Inter-message delay - 50

<SW>60810032

Inter-character/message delay - Inter-message delay - 80

<SW>60810050

Inter-character/message delay - Inter-message delay - 100

<SW>60810064

• Data editing

- IMPORTANT [[[[The data editing function is only available with STCDecode version 1.1.5.0 or later]]]]
- Your product can edit the data it receives before it transmits it to the host system.
- Define up to 7 input scenarios to intercept the data you want to edit.
- The order in which you define the scenarios is important (the product compares incoming data with each scenario in turn and edits the data for the first matching scenario it finds).

1. Activate the scenario(s) you want the product to detect.
2. Define the input data you want to intercept for editing (any combination of input type, input length, input mask).
3. Define the actions (editing) you want to apply to this input:
   - Select a scenario
   - Define the Action list (editing) for the selected scenario

- Make sure that the input scenarios you define actually correspond to incoming data conditions:
  - Correct input type ('all' = all input types)
  - Correct input length ('0' = all input lengths)
  - Correct input mask (no value = all input character combinations)

Activate scenarios

• Scenario 1

Data editing - Scenario 1 - Disable (*)

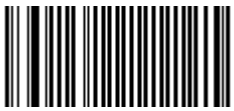
<SW>654000

Data editing - Scenario 1 - Enable

<SW>654001

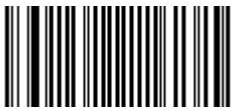
- **Scenario 2**

Data editing - Scenario 2 - Disable (*)



<SW>654100

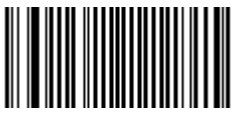
Data editing - Scenario 2 - Enable



<SW>654101

- **Scenario 3**

Data editing - Scenario 3 - Disable (*)



<SW>654200

Data editing - Scenario 3 - Enable

<SW>654201

- **Scenario 4**

Data editing - Scenario 4 - Disable (*)

<SW>654300

Data editing - Scenario 4 - Enable

<SW>654301

- **Scenario 5**

Data editing - Scenario 5 - Disable (*)

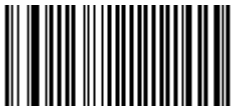
<SW>654400

Data editing - Scenario 5 - Enable

<SW>654401

- **Scenario 6**

Data editing - Scenario 6 - Disable (*)



<SW>654500

Data editing - Scenario 6 - Enable

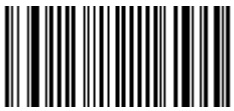
<SW>654501

- **Scenario 7**

Data editing - Scenario 7 - Disable (*)

<SW>654600

Data editing - Scenario 7 - Enable



<SW>654601

Symbologies

• Infomail

Infomail - Disable (*)

<SW>394000

Infomail - Enable

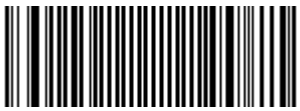
<SW>394001

• Symbology identifier

• User defined

- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or deactivate UDSI transmission.
- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

Infomail - Symbology identifier - User defined - P8 (*)



<SW>39C000025038

• Code mark

- See "Data transmission settings - symbology identifier - Code mark" to activate or deactivate Code mark transmission.
- Use the default value or compose your Code mark for this symbology (1 character).

Infomail - Symbology identifier - Code mark - * (*)

<SW>39482A

• Intelligent mail

Intelligent mail - Disable (*)

<SW>3A4000

Intelligent mail - Enable

<SW>3A4001

• Symbology identifier

• User defined

- User defined symbology identifier.

- See "Data transmission settings - symbology identifier - UDSI" to activate or deactivate UDSI transmission.

- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

Intelligent mail - Symbology identifier - User defined - PA (*)

<SW>3AC000025041

• Code mark

- See "Data transmission settings - symbology identifier - Code mark" to activate or deactivate Code mark transmission.

- Use the default value or compose your Code mark for this symbology (1 character).

Intelligent mail - Symbology identifier - Code mark - * (*)

<SW>3A482A

• Interleaved 2 of 5

- Numerical symbology.

- For GTIN compatibility set barcode length to one fixed length of 14 characters.

Interleaved 2 of 5 - Disable (*)

<SW>444000

Interleaved 2 of 5 - Enable

<SW>444001

• Symbology identifier

• User defined

Interleaved 2 of 5 - Symbology identifier - User defined - B2 (*)

<SW>44C000024232

• Code mark

- See "Data transmission settings - symbology identifier - Code mark" to activate or deactivate Code mark transmission.

- Use the default value or compose your Code mark for this symbology (1 character).

Interleaved 2 of 5 - Symbology identifier - Code mark - I (*)

<SW>444849

• Check digit

- Especially recommended for variable length Interleaved 2 of 5 and if "consecutive same read data validation" (data decoding security parameters) is not activated.

• Check digit verification

Interleaved 2 of 5 - Check digit - Check digit verification - Disable (*)

<SW>444C00

Interleaved 2 of 5 - Check digit - Check digit verification - Modulo 10

<SW>444C01

Interleaved 2 of 5 - Check digit - Check digit verification - French CIP HR

<SW>444C02

• Check digit transmission

Interleaved 2 of 5 - Check digit - Check digit transmission - Disable (*)

<SW>445400

Interleaved 2 of 5 - Check digit - Check digit transmission - Enable

<SW>445401

• Barcode length

Use the L1 as minimum length option if you know the minimum length of the codes in your application!!!
- To optimize decoding performance and increase security, select the same length as the minimum length in your application (do not select a shorter length!!).
  = [barcode data] + [Check digit]
- Recommended minimum length = 4 characters.
- Interleaved 2 of 5 always encodes an even number of characters.
- For codes with an odd number of characters, you can add a last character printed as 5 narrow bars (not transmitted).
- For GTIN compatibility set barcode length to one fixed length of 14 characters
- compose 1 or 2 or 3 fixed lengths provides the best performance
  and security if the codes in your application have fixed lengths
- recommended minimum length = 4 characters
  IMPORTANT: Do not select a fixed length of "2 characters" unless
  absolutely necessary - Interleaved 2 of 5 is not a secure symbology
  and your product will find "bar codes" even where they don't exist !!!

• Length mode

- L1 = Codes with as many characters as specified by L1 and longer are read (L2 and L3 are not used).
- L2 = Only codes that comply with the lengths specified by L1, L2, and L3 will be read.
- L3 = Codes at least the length specified by L1 and no longer than the maximum length specified by L2 are read (L3 is not used).

Interleaved 2 of 5 - Barcode length - Length mode - L1 as Minimal length (*)

<SW>445300

Interleaved 2 of 5 - Barcode length - Length mode - L1, L2, L3 as fixed length

<SW>445301

Interleaved 2 of 5 - Barcode length - Length mode - L1 as min, L2 as max

<SW>445302

• Set length L1, L2 and L3

Set barcode length L1, L2 and L3 according to the barcode length mode used.

• Reading tolerance

- Sets the tolerance level for reading hard to read bar codes.
- High = most permissive (reads codes of variable quality).
- Low = least permissive (only reads high quality codes that meet official Code 39 standards)
- Quiet zone verification (space before and after bar code to ensure correct decoding).

Interleaved 2 of 5 - Reading tolerance - High (*)

<SW>444F00

Interleaved 2 of 5 - Reading tolerance - Medium

<SW>444F01

Interleaved 2 of 5 - Reading tolerance - Low

<SW>444F02

- **Japan Post**

- 4-State postal barcode.
- Only available with an area imager.

Japan Post - Disable (*)

<SW>354000

Japan Post - Enable

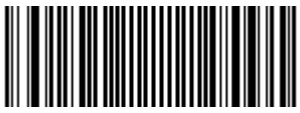
<SW>354001

• Symbology identifier

• User defined

- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or deactivate UDSI transmission.
- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

Japan Post - Symbology identifier - User defined - P5 (*)



<SW>35C000025035

• Code mark

- See "Data transmission settings - symbology identifier - Code mark" to activate or deactivate Code mark transmission.
- Use the default value or compose your Code mark for this symbology (1 character).

Japan Post - Symbology identifier - Code mark - * (*)

<SW>35482A

• Check digit transmission

Japan Post - Check digit transmission - Enable (*)

<SW>355401

Japan Post - Check digit transmission - Disable

<SW>355400

• **Matrix 2 of 5**

- Numerical symbology.
-

Matrix 2 of 5 - Disable (*)

<SW>454000

Matrix 2 of 5 - Enable

<SW>454001

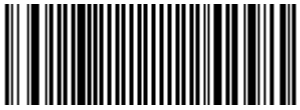
• Symbology identifier

• User defined

- User defined symbology identifier.

- See "Data transmission settings - symbology identifier - UDSI" to activate or deactivate UDSI transmission.
- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

Matrix 2 of 5 - Symbology identifier - User defined - B4 (*)



<SW>45C000024234

• Code mark

- See "Data transmission settings - symbology identifier - Code mark" to activate or deactivate Code mark transmission.
- Use the default value or compose your Code mark for this symbology (1 character).

Matrix 2 of 5 - Symbology identifier - Code mark - D (*)

<SW>454844

• Matrix stop/start char

Matrix 2 of 5 - Matrix stop/start char - Regular (*)

<SW>454300

Matrix 2 of 5 - Matrix stop/start char - ChinaPost

<SW>454301

Matrix 2 of 5 - Barcode length - Length mode - L1 as Minimal length (*)

<SW>455300

Matrix 2 of 5 - Barcode length - Length mode - L1, L2, L3 as fixed length

<SW>455301

Matrix 2 of 5 - Barcode length - Length mode - L1 as min, L2 as max

<SW>455302

• Set length L1, L2 and L3

Set barcode length L1, L2 and L3 according to the barcode length mode used.

• **MatrixCode**

- Two-dimensional alphanumerical symbology used by UPS.
- Only available with models equipped with an area imager.

MaxiCode - Disable (*)

<SW>524000

MaxiCode - Enable

<SW>524001

• Symbology identifier

• User defined

- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or deactivate UDSI transmission.
- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

MaxiCode - Symbology identifier - User defined - D2 (*)

<SW>52C000024432

• Code mark

- See "Data transmission settings - symbology identifier - Code mark" to activate or deactivate Code mark transmission.
- Use the default value or compose your Code mark for this symbology (1 character).

MaxiCode - Symbology identifier - Codemark - * (*)

<SW>52482A

• Mode 0

- This mode is obsolete.
- We do not recommend using this mode.

MaxiCode - Mode 0 - Disable (*)

<SW>524100

MaxiCode - Mode 0 - Enable

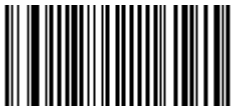
<SW>524101

• Header

MaxiCode - Mode 0 - Header - regular (AIM) (*)

<SW>524200

MaxiCode - Mode 0 - Header - Extended (Mode 2&3 like)



<SW>524201

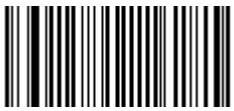
• MicroPDF417

- Two-dimensional symbology.
- Alphanumeric full ASCII symbology - letter case defined.
- It is highly recommended to select "stacked codes" in sensor optimization (see Operating settings/read optimization).

MicroPDF417 - Disable (*)

<SW>4C4200

MicroPDF417 - Enable



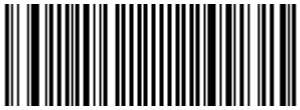
<SW>4C4201

• Symbology identifier

• User defined

- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or deactivate UDSI transmission.
- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

MicroPDF417 - Symbology identifier - User defined - C8 (*)



<SW>4CC100024338

• Code mark

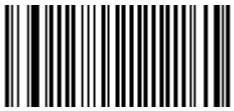
MicroPDF417 - Symbology identifier - Code mark - * (*)

<SW>4C492A

• code 128 emulation

- When active and reading a MicroPDF code containing a special flag, the scanner transmits the Code 128 AIM symbology identifier instead of the MicroPDF symbology identifier ( ]C instead of]L)

MicroPDF417 - Code 128 emulation - Disable (*)



<SW>4C4500

MicroPDF417 - Code 128 emulation - Enable

<SW>4C4501

• MSI Code

MSI Code - Disable (*)

<SW>464000

MSI Code - Enable

<SW>464001

• Symbology identifier

• User defined

- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or deactivate UDSI transmission.
- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

MSI Code - Symbology identifier - User defined - B8 (*)

<SW>46C000024238

• Code mark

MSI Code - Symbology identifier - Code mark - D (*)

<SW>464844

• Check digit

• Check digit verification

MSI Code - Check digit - Check digit verification - Modulo 10 (*)

<SW>464C01

MSI Code - Check digit - Check digit verification - Double Modulo 10

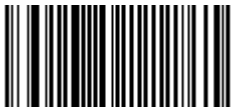
<SW>464C02

• Check digit transmission

MSI Code - Check digit - Check digit transmission - Enable (*)

<SW>465401

MSI Code - Check digit - Check digit transmission - Disable



<SW>465400

• Barcode length

• Length mode

MSI Code - Barcode length - Length mode - L1 as Minimal length (*)

<SW>465300

MSI Code - Barcode length - Length mode - L1, L2, L3 as fixed length

<SW>465301

MSI Code - Barcode length - Length mode - L1 as min, L2 as max

<SW>465302

• Set length L1, L2 and L3

- Set barcode length L1, L2 and L3 according to the barcode length mode used.

• Multicode

- The Multicode function is used configure the scanner to read a series of bar codes and then transmit them all at once.
- Follow these steps to setup the Multicode function:
  1. Activate the Multicode function.
  2. Select the number of bar codes to be included the Multicode.
  3. Define which bar codes are part of the Multicode by specifying the bar code ID, length, and/or mask.
  4. Define a separator to be used between bar codes.
  5. Define the Multicode transmission parameters.
  6.Define symbology identifiers for each type of transmission (if wanted).
- Only available with models equipped with an area imager.

• Activation

Multicode - Activation - Disable (*)

<SW>594000

Multicode - Activation - Enable

<SW>594001

Multicode - Activation - Exclusive

<SW>594002

• Bar code separator

Compose up to 4 characters to be used as a separator between each bar code in the Multicode.
Multicode - Bar code separator - "<>" (*)

<SW>59D200023C3E

• Symbology identifier

• User defined

- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or deactivate UDSI transmission.
- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

Multicode - Symbology identifier - User defined - Complete Multicode default "UDM0" (*)

<SW>59D0000455444D30

Complete Multicode Compose

Multicode - Symbology identifier - User defined - Incomplete Multicode default "UDM1" (*)

<SW>59D1000455444D31

Incomplete Multicode Compose

- **Code mark**

- See "Data transmission settings - symbology identifier - Code mark" to activate or deactivate Code mark transmission.
- Use the default value or compose your Code mark for this symbology (1 character).

Multicode - Symbology identifier - Code mark - Complete Multicode default " * " (*)

<SW>59482A

Complete Multicode Compose

Multicode - Symbology identifier - Code mark - Incomplete Multicode default " * " (*)

<SW>59492A

• Incomplete transmission

- When active an Incomplete Multicode is transmitted.
- If not active, Incomplete Multicodes are discarded.

Multicode - Incomplete transmission - Disable (*)

<SW>594200

Multicode - Incomplete transmission - Enable

<SW>594201

• Incomplete transmission timeout

- Select the timeout used when Incomplete transmission is active. The timeout

starts after the last bar code is read.
- Value is in milliseconds.

• Incomplete decode event

- When active an Incomplete decode event is sent by the host if the trigger is deactivated until all codes in the Multicode are read.

Multicode - Incomplete decode event - Disable (*)

<SW>594300

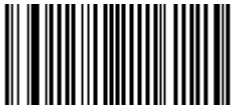
Multicode - Incomplete decode event - Enable

<SW>594301

• PDF417

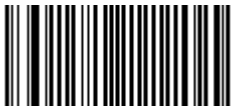
- Two-dimensional symbology.
- Alphanumeric full ASCII symbology - letter case defined.

PDF417 - Enable (*)



<SW>4C4001

PDF417 - Disable



<SW>4C4000

• Symbology identifier

• User defined

- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or deactivate UDSI transmission.

- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

PDF417 - Symbology identifier - User defined - C7 (*)

<SW>4CC000024337

- **Code mark**

- See "Data transmission settings - symbology identifier - Code mark" to activate or deactivate Code mark transmission.

- Use the default value or compose your Code mark for this symbology (1 character).

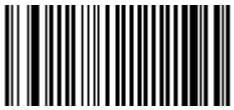
PDF417 - Symbology identifier - Code mark - * (*)

<SW>4C482A

• Irregular PDF

• Structured append

PDF417 - Structured append - Disable (*)



<SW>4C4100

PDF417 - Structured append - Enable

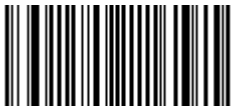
<SW>4C4101

• Header transmission

PDF417 - Structured append - Header transmission - Disable (*)

<SW>4C5800

PDF417 - Structured append - Header transmission - Enable



<SW>4C5801

• Planet

- Postal symbology .
- Only available with models equipped with an area imager.

Planet - Disable (*)

<SW>314000

Planet - Enable

<SW>314001

• Symbology identifier

• User defined

- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or deactivate UDSI transmission.
- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

Planet - Symbology identifier - User defined - P1 (*)

<SW>31C000025031

• Code mark

- See "Data transmission settings - symbology identifier - Code mark" to activate or deactivate Code mark transmission.
- Use the default value or compose your Code mark for this symbology (1 character).

Planet - Symbology identifier - Code mark - * (*)

<SW>31482A

• Check digit transmission

Planet - Check digit transmission - Enable (*)

<SW>315401

Planet - Check digit transmission - Disable

<SW>315400

• Plessey Code

Plessey Code - Disable (*)

<SW>474000

Plessey Code - Enable

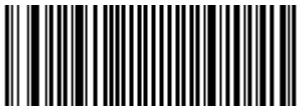
<SW>474001

• Symbology identifier

• User defined

- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or deactivate UDSI transmission.
- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

Plessey Code - Symbology identifier - User defined - C2 (*)



<SW>47C000024332

• Code mark

- See "Data transmission settings - symbology identifier - Code mark" to activate or deactivate Code mark transmission.
- Use the default value or compose your Code mark for this symbology (1 character).

Plessey Code - Symbology identifier - Code mark - D (*)

<SW>474844

• Check digit transmission

Plessey Code - Check digit transmission - Disable (*)

<SW>475400

Plessey Code - Check digit transmission - Enable

<SW>475401

• Unconventional stop

Plessey Code - Unconventional stop - Disable (*)

<SW>474300

Plessey Code - Unconventional stop - Enable

<SW>474301

• Barcode length

- Use the L1 as minimum length option if you know the minimum length of the codes in your application!!!
- To optimize decoding performance and increase security, select the same length as the minimum length in your application (do not select a shorter length!!).

Length = [start] + [barcode data] + [2-character Check digit] + [stop]

- Minimum length possible = 5 characters.

Maximum length possible = 25 characters.

• Length mode

- L1 = Codes with as many characters as specified by L1 and longer are read

(L2 and L3 are not used).
- L2 = Only codes that comply with the lengths specified by L1, L2, and L3 will be read.
- L3 = Codes at least the length specified by L1 and no longer than the maximum length specified by L2 are read (L3 is not used).

Plessey Code - Barcode length - Length mode - L1 as Minimal length (*)

<SW>475300

Plessey Code - Barcode length - Length mode - L1, L2, L3 as fixed length

<SW>475301

Plessey Code - Barcode length - Length mode - L1 as min, L2 as max

<SW>475302

• Set length L1, L2 and L3

• Postnet

Postnet - Disable (*)

<SW>304000

Postnet - Enable

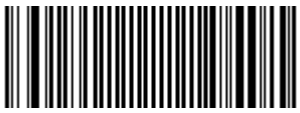
<SW>304001

• Symbology identifier

• User defined

- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or deactivate UDSI transmission.
- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

Postnet - Symbology identifier - User defined - P0 (*)



<SW>30C000025030

• Code mark

- See "Data transmission settings - symbology identifier - Code mark" to activate or deactivate Code mark transmission.
- Use the default value or compose your Code mark for this symbology (1 character).

Postnet - Symbology identifier - Code mark - * (*)

<SW>30482A

• Check digit transmission

Postnet - Check digit transmission - Enable (*)

<SW>305401

Postnet - Check digit transmission - Disable

<SW>305400

• QR Code

- Two-dimensional matrix symbology.
- Only available with models equipped with an area imager.
- Can encode up to 2509 numeric or 1520 alphanumeric characters.
- Offers three levels of error detection.
- Activating QR Code activates Model 2. Use the Model 1Control activation if you are using Model 1 (not supported by all scanners).
- Negative image QR Code not supported.

QR Code - Disable (*)

<SW>554000

QR Code - Enable

<SW>554001

• Model 1 control

QR Code - Model 1 control - Disable (*)

<SW>554100

QR Code - Model 1 control - Enable

<SW>554101

• Inverse video

- Normal = used for decoding black bar codes printed on white background.
- Inverse = used for decoding white bar codes printed on black background.
- Automatic = used to decode both types of bar codes

QR Code - Inverse video - Normal (*)

<SW>554200

QR Code - Inverse video - Inverse

<SW>554201

QR Code - Inverse video - Automatic

<SW>554202

• MicroQR activation

QR Code - MicroQR activation - disable (*)

<SW>554400

QR Code - MicroQR activation - enable

<SW>554401

• Symbology identifier

• User defined

- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or deactivate UDSI transmission.
- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

QR Code - Symbology identifier - User defined - D1 (*)

<SW>55C000024431

• Code mark

- See "Data transmission settings - symbology identifier - Code mark" to activate or deactivate Code mark transmission.
- Use the default value or compose your Code mark for this symbology (1 character).

QR Code - Symbology identifier - Code mark - * (*)

<SW>55482A

• Structured append

QR Code - Structured append - Disable (*)

<SW>554500

QR Code - Structured append - Enable

<SW>554501

• Header transmission

QR Code - Structured append - Header transmission - Disable (*)

<SW>554600

QR Code - Structured append - Header transmission - Enable

<SW>554601

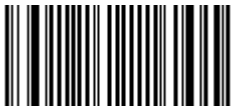
• Standard 2 of 5

- Numerical symbology.
- Default format = Identicon (6 start/stop bars).
- Also referred to as "Straight 2 of 5" and "Industrial 2 of 5."

Standard 2 of 5 - Disable (*)

<SW>484000

Standard 2 of 5 - Enable



<SW>484001

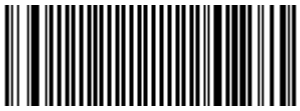
• Symbology identifier

• User defined

- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or deactivate UDSI transmission.
- Use the default value or compose your custom symbology identifier for this

symbology (1 - 4 characters).

Standard 2 of 5 - Symbology identifier - User defined - B5 (*)



<SW>48C000024235

• Code mark

- See "Data transmission settings - symbology identifier - Code mark" to activate or deactivate Code mark transmission.
- Use the default value or compose your Code mark for this symbology (1 character).

Standard 2 of 5 - Symbology identifier - Code mark - D (*)

<SW>484844

• Format

Standard 2 of 5 - Format - Identicon (6 start/stop bars) (*)

<SW>485800

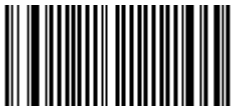
Standard 2 of 5 - Format - Computer Identics (4 start/stop bars)

<SW>485801

• Check digit

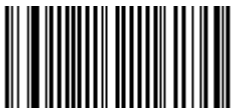
• Check digit verification

Standard 2 of 5 - Check digit - Check digit verification - Disable (*)



<SW>484C00

Standard 2 of 5 - Check digit - Check digit verification - Modulo 10



<SW>484C01

• Check digit transmission

Standard 2 of 5 - Check digit - Check digit transmission - Disable (*)

<SW>485400

Standard 2 of 5 - Check digit - Check digit transmission - Enable

<SW>485401

• Barcode length

- Use the L1 as minimum length option if you know the minimum length of the codes in your application!!!
- To optimize decoding performance and increase security, select the same length as the minimum length in your application (do not select a shorter length!!).

Length = [barcode data] + [Check digit]
- Minimum length possible = 3 characters.
- compose 1 or 2 or 3 fixed lengths provides the best performance and security if the codes in your application have fixed lengths

• Length mode

- L1 = Codes with as many characters as specified by L1 and longer are read (L2 and L3 are not used).
- L2 = Only codes that comply with the lengths specified by L1, L2, and L3 will be read.
- L3 = Codes at least the length specified by L1 and no longer than the maximum length specified by L2 are read (L3 is not used).

Standard 2 of 5 - Barcode length - Length mode - L1 as Minimal length (*)

<SW>485300

Standard 2 of 5 - Barcode length - Length mode - L1, L2, L3 as fixed length

<SW>485301

Standard 2 of 5 - Barcode length - Length mode - L1 as min, L2 as max

<SW>485302

• Sweden Post

Sweden Post - Disable (*)

<SW>374000

Sweden Post - Enable

<SW>374001

• Symbology identifier

• User defined

- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or deactivate UDSI transmission.
- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

Sweden Post - Symbology identifier - User defined - P7 (*)

<SW>37C000025037

• Code mark

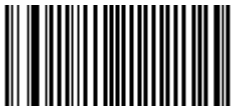
- See "Data transmission settings - symbology identifier - Code mark" to activate or deactivate Code mark transmission.
- Use the default value or compose your Code mark for this symbology (1 character).

Sweden Post - Symbology identifier - Code mark - * (*)

<SW>37482A

• Telepen

Telepen - Disable (*)



<SW>494000

Telepen - Enable

<SW>494001

• Symbology identifier

• User defined

- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or deactivate UDSI transmission.
- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

Telepen - Symbology identifier - User defined - C6 (*)

<SW>49C000024336

compose

• Code mark

- See "Data transmission settings - symbology identifier - Code mark" to activate or deactivate Code mark transmission.
- Use the default value or compose your Code mark for this symbology (1 character).

Telepen - Symbology identifier - Code mark - * (*)

<SW>49482A

• Format

Telepen - Format - Ascii (*)

<SW>495800

Telepen - Format - Numeric

<SW>495801

• Barcode length

- Use the L1 as minimum length option if you know the minimum length of the codes in your application!!!
- To optimize decoding performance and increase security, select the same length as the minimum length in your application (do not select a shorter length!!).

Length = [barcode data]

- Minimum length possible = 1 character.
-

• Length mode

- L1 = Codes with as many characters as specified by L1 and longer are read (L2 and L3 are not used).
- L2 = Only codes that comply with the lengths specified by L1, L2, and L3 will be read.
- L3 = Codes at least the length specified by L1 and no longer than the maximum length specified by L2 are read (L3 is not used).

Telepen - Barcode length - Length mode - L1 as Minimal length (*)

<SW>495300

Telepen - Barcode length - Length mode - L1, L2, L3 as fixed length

<SW>495301

Telepen - Barcode length - Length mode - L1 as min, L2 as max

<SW>495302

• TLC 39

- TCIF Linked Code 39.
- Symbology consisting of two elements:
  MicroPDF417 code and a Code 39 code.
- Available with firmware version 1.00 or higher.

TLC 39 - Disable (*)

<SW>4E4000

TLC 39 - Enable

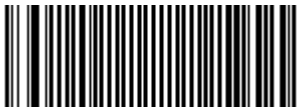
<SW>4E4001

• Symbology identifier

• User defined

- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or deactivate UDSI transmission.
- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

TLC 39 - Symbology identifier - User defined - H0 (*)



<SW>4EC000024830

• Code mark

- See "Data transmission settings - symbology identifier - Code mark" to activate or deactivate Code mark transmission.
- Use the default value or compose your Code mark for this symbology (1 character).

TLC 39 - Symbology identifier - Code mark - * (*)

<SW>4E482A

• Linear transmission only

TLC 39 - Linear transmission only - Disable (*)

<SW>4E4400

TLC 39 - Linear transmission only - Enable

<SW>4E4401

• ECI security

- Used to differentiate between TLC 39 and standard Code 39.
- Higher security level = lower decode rate.

TLC 39 - ECI security - 10 (*)

<SW>4E470A

Symbologies – Part II

- Symbology = bar code type or family (e.g. Code 39, UPC, EAN).
- Activate the symbologies you need and modify the settings for your symbologies if required.
- To optimize performance, only activate symbologies you need !!! (deactivate the Code 39 and EAN/UPC default symbologies if you don't need them.

• Disable all symbologies

Disable all symbologies

<CCMD>4003

• Australian Post

- 4-State postal barcode
- Only available with models equipped with an area imager.

Australian Post - Disable (*)

<SW>344000

Australian Post - Enable

<SW>344001

• Symbology identifier

• User defined

Australian Post - Symbology identifier - User defined - P3 (*)

<SW>34C000025033

• Code mark

- See "Data transmission settings - symbology identifier - code mark" to activate or deactivate code mark transmission.
- Use the default value or compose your code mark for this symbology (1 character).

Australian Post - Symbology identifier - Code mark - * (*)

<SW>34482A

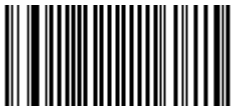
• Aztec

- Two-dimensional matrix style symbology.
- Can encode around 3000 characters using entire 256-byte ASCII.
- Only available with models equipped with an area imager.

Aztec - Disable (*)

<SW>534000

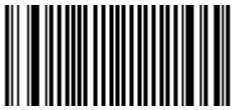
Aztec - Enable



<SW>534001

• Aztec Runes

Aztec - Aztec Runes - Disable (*)



<SW>534200

Aztec - Aztec Runes - Enable

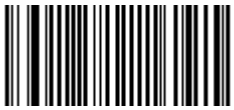
<SW>534201

• GS1-128 emulation

Aztec - GS1-128 emulation - Disable (*)

<SW>534300

Aztec - GS1-128 emulation - Enable



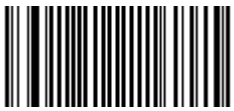
<SW>534301

• Structured append

Aztec - Structured append - Disable (*)

<SW>534100

Aztec - Structured append - Enable



<SW>534101

• Header transmission

Aztec - Structured append - Header transmission - Disable (*)

<SW>534600

Aztec - Structured append - Header transmission - Enable

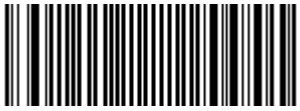
<SW>534601

• Symbology identifier

• User defined

- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or deactivate UDSI transmission.
- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

Aztec - Symbology identifier - User defined - D3 (*)



<SW>53C000024433

• Code mark

- See "Data transmission settings - symbology identifier - code mark" to activate or deactivate code mark transmission.
- Use the default value or compose your code mark for this symbology (1 character).

Aztec - Symbology identifier - Code mark - * (*)

<SW>53482A

• BPO

- British Post Office symbology
- 4-State postal barcode
- only available with models equipped with an area imager

BPO - Disable (*)

<SW>324000

BPO - Enable

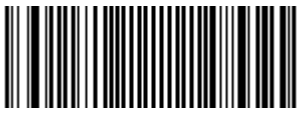
<SW>324001

• Symbology identifier

• UDSI

- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or deactivate UDSI transmission.
- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).
- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or deactivate UDSI transmission.
- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

BPO - Symbology identifier - UDSI - P2 (*)



<SW>32C000025032

• code mark

- See "Data transmission settings - symbology identifier - code mark" to activate or deactivate code mark transmission.
- Use the default value or compose your code mark for this symbology (1 character).
- See "Data transmission settings - symbology identifier - code mark" to activate or deactivate code mark transmission.
- Use the default value or compose your code mark for this symbology (1 character).

BPO - Symbology identifier - code mark - * (*)

<SW>32482A

• check digit transmission

BPO - check digit transmission - Enable (*)

<SW>325401

BPO - check digit transmission - Disable

<SW>325400

• Canada Post

- 4-state symbology

Canada Post - Disable (*)

<SW>334000

Canada Post - Enable

<SW>334001

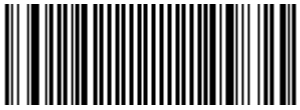
• Symbology identifier

• User defined

- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or

deactivate UDSI transmission.
- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

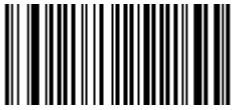
Canada Post - Symbology identifier - User defined - P6 (*)



<SW>33C000025036

• code mark

Canada Post - Symbology identifier - Code mark - * (*)



<SW>33482A

• Codabar

- numerical symbology

Codabar - Disable (*)

<SW>404000

Codabar - Enable

<SW>404001

• Symbology identifier

• User defined

- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or

deactivate UDSI transmission.
- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

Codabar - Symbology identifier - User defined - B7 (*)

<SW>40C000024237

• code mark

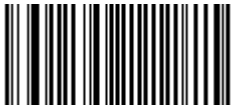
- See "Data transmission settings - symbology identifier - code mark" to activate or deactivate code mark transmission.
- Use the default value or compose your code mark for this symbology (1 character)

Codabar - Symbology identifier - Code mark - D (*)

<SW>404844

• Start/Stop

Codabar - Start/Stop - not transmitted (*)



<SW>405800

Codabar - Start/Stop - a, b, c, d

<SW>405801

Codabar - Start/Stop - A, B, C, D

<SW>405802

Codabar - Start/Stop - a, b, c, d / t, n, *, e

<SW>405803

Codabar - Start/Stop - DC1, DC2, DC3, DC4

<SW>405804

• CLSI library system

- Spaces inserted after characters 1, 5, 10 in the 14-character label (used in the USA by libraries using the CLSI system).
  Example: "39990000192148" is transmitted as "3 9990 00019 2148"
- Start/stop can be transmitted or not transmitted as required.

Codabar - CLSI library system - Disable (*)

<SW>405900

Codabar - CLSI library system - Enable

<SW>405901

• Check digit

• Check digit verification

Codabar - Check digit - check digit verification - Disable (*)

<SW>404C00

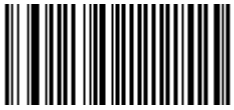
Codabar - Check digit - check digit verification - Enable

<SW>404C01

• Check digit transmission

- You can chose to transmit or not transmitted the check digit.

Codabar - Check digit - check digit transmission - Disable (*)



<SW>405400

Codabar - Check digit - check digit transmission - Enable

<SW>405401

• Barcode length

• Length mode

- Use the L1 as minimum length option if you know the minimum length of the codes in your application!!!
- To optimize decoding performance and increase security, select the same length as the minimum length in your application (do not select a shorter length!!).

  Length = [start] + [barcode data] + [check digit] + [stop]
- Minimum length possible = 3 characters.
- If the codes in your application have fixed lengths, use barcode length mode

"L1, L2, and L3 as fixed lengths.

Codabar - Barcode length - Length mode - L1 as Minimal length (*)

<SW>405300

Codabar - Barcode length - Length mode - L1, L2, L3 as fixed length

<SW>405301

Codabar - Barcode length - Length mode - L1 as min, L2 as max

<SW>405302

• Set length L1, L2 and L3

- Set barcode length L1, L2 and L3 according to the barcode length mode used.

• Concatenation

- 2 adjacent Codabar codes scanned in a single sweep can be transmitted as a single message

1. Choose one of the transmission options to activate concatenation.
2. Choose a concatenation mode option to indicate when you want adjacent codes to be concatenated.

- Intermediate start/stop characters are not transmitted (only first start and last stop are transmitted).

Codabar - Concatenation - Disable (*)

<SW>405A00

Codabar - Concatenation - Transmit concatenated codes or single codes

<SW>405A02

Codabar - Concatenation - Only transmit concatenated codes

<SW>405A01

- **Concatenation mode**

- Applies concatenation according to the desired start / stop configuration.

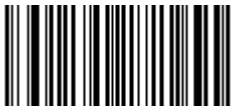
Codabar - Concatenation - Concatenation mode - No restriction (*)

<SW>405B00

Codabar - Concatenation - Concatenation mode - Second code start = first code stop

<SW>405B01

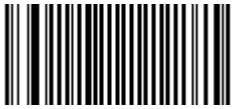
Codabar - Concatenation - Concatenation mode - American blood commission



<SW>405B02

• Codablock A

Codablock - Codablock A - Disable (*)



<SW>4D4000

Codablock - Codablock A - Enable

<SW>4D4001

• Symbology identifier

• User defined

- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or deactivate UDSI transmission.
- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

Codablock - Codablock A - Symbology identifier - User defined - K0 (*)

<SW>4DC000024B30

• code mark

- See "Data transmission settings - symbology identifier - code mark" to activate or deactivate code mark transmission.
- Use the default value or compose your code mark for this symbology (1 character).

Codablock - Codablock A - Symbology identifier - Code mark - * (*)

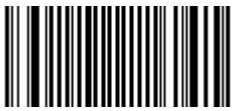
<SW>4D482A

• Codablock F

Codablock - Codablock F - Disable (*)

<SW>4D4100

Codablock - Codablock F - Enable



<SW>4D4101

• Symbology identifier

• User defined

- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or deactivate UDSI transmission.
- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

Codablock - Codablock F - Symbology identifier - User defined - K1 (*)

<SW>4DC100024B31

• code mark

Codablock - Codablock F - Symbology identifier - Code mark - * (*)

<SW>4D492A

• Code 11

Code 11 - Disable (*)

<SW>4A4000

Code 11 - Enable

<SW>4A4001

• Symbology identifier

• User defined

- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or deactivate UDSI transmission.
- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

Code 11 - Symbology identifier - User defined - C1 (*)

<SW>4AC000024331

• Code mark

- See "Data transmission settings - symbology identifier - code mark" to activate or deactivate code mark transmission.
- Use the default value or compose your code mark for this symbology (1 character).

Code 11 - Symbology identifier - Code mark - * (*)

<SW>4A482A

• Check digits

Code 11 - Check digits - 1 digit (*)

<SW>4A4C01

Code 11 - Check digits - 2 digits

<SW>4A4C02

Code 11 - Check digits - Transmitted (*)

<SW>4A5401

Code 11 - Check digits - Not transmitted

<SW>4A5400

• Barcode length

- Use the L1 as minimum length option if you know the minimum length of the codes in your application!!!
- To optimize decoding performance and increase security, select the same length as the minimum length in your application (do not select a shorter length!!).

• Length mode

- L1 = Codes with as many characters as specified by L1 and longer are read (L2 and L3 are not used).
- L2 = Only codes that comply with the lengths specified by L1, L2, and L3 will be read.
- L3 = Codes at least the length specified by L1 and no longer than the maximum length specified by L2 are read (L3 is not used).

Code 11 - Barcode length - Length mode - L1 as Minimal length (*)

<SW>4A5300

Code 11 - Barcode length - Length mode - L1, L2, L3 as fixed length

<SW>4A5301

Code 11 - Barcode length - Length mode - L1 as min, L2 as max

<SW>4A5302

• Set length L1, L2 and L3

- Set barcode length L1, L2 and L3 according to the barcode length mode used.

• Code 39

- Alphanumeric symbology.
- Letter case not defined - transmitted in upper case.
- Format: standard 43 characters (default) or full ASCII (see "format" for lists).

Code 39 - Disable

<SW>424000

Code 39 - Enable (*)

<SW>424001

• Symbology identifier

• User defined

- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or deactivate UDSI transmission.
- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

Code 39 - Symbology identifier - User defined - B1 (*)

<SW>42C000024231

• Code mark

- See "Data transmission settings - symbology identifier - code mark" to activate or deactivate code mark transmission.
- Use the default value or compose your code mark for this symbology (1 character).

Code 39 - Symbology identifier - Code mark - * (*)

<SW>42482A

• Format

Code 39 - Format - Standard 43 characters (*)

<SW>425A00

Code 39 - Format - Full ASCII (extended)

<SW>425A01

• Start/Stop

Code 39 - Start/Stop - Not transmitted (*)

<SW>425800

Code 39 - Start/Stop - Transmitted

<SW>425801

• accepted characters

Code 39 - Start/Stop - accepted characters - '*' only (*)

<SW>425902

Code 39 - Start/Stop - accepted characters - '$' only

<SW>425901

Code 39 - Start/Stop - accepted characters - '$' and '*'

<SW>425903

- **Check digit**
- **check digit verification**

Code 39 - Check digit - check digit verification - Disable (*)

<SW>424C00

Code 39 - Check digit - check digit verification - Modulo 43

<SW>424C01

Code 39 - Check digit - check digit verification - French CIP

<SW>424C02

Code 39 - Check digit - check digit verification - Italian CPI

<SW>424C03

• check digit transmission

You can chose to transmit or not transmitted the check digit.

Code 39 - Check digit - check digit transmission - Disable (*)

<SW>425400

Code 39 - Check digit - check digit transmission - Enable

<SW>425401

• Barcode length

• Length mode

- L1 = Codes with as many characters as specified by L1 and longer are read (L2 and L3 are not used).
- L2 = Only codes that comply with the lengths specified by L1, L2, and L3 will be read.
- L3 = Codes at least the length specified by L1 and no longer than the maximum length specified by L2 are read (L3 is not used).

Code 39 - Barcode length - Length mode - L1 as Minimal length (*)

<SW>425300

Code 39 - Barcode length - Length mode - L1, L2, L3 as fixed length

<SW>425301

Code 39 - Barcode length - Length mode - L1 as min, L2 as max

<SW>425302

• Reading range

- Applies a special algorithm for long-distance reading (default setting).
- Use the "normal" setting if distance reading is not required.

Code 39 - Reading range - Extended (*)

<SW>424701

Code 39 - Reading range - Normal

<SW>424700

• Reading tolerance

- Sets the tolerance level for reading hard to read bar codes.
- High = most permissive (reads codes of variable quality).
- Low = least permissive (only reads high quality codes that meet official Code 39 standards)
- Quiet zone verification (space before and after bar code to ensure correct decoding).

Code 39 - Reading tolerance - High (*)

<SW>424F00

Code 39 - Reading tolerance - Medium

<SW>424F01

Code 39 - Reading tolerance - Low

<SW>424F02

• Unconventional Code 39

- Used for decoding unconventional Code 39 such as:
  - very large inter-character
  - large ratio between narrow and wide elements

Code 39 - Unconventional Code 39 - Disable (*)

<SW>424300

Code 39 - Unconventional Code 39 - Enable

<SW>424301

• Special keys interpretation

- Special keyboard keys such as [Enter] and [Tab] (see list below) can be interpreted and transmitted by using dual-character combinations.
- This function is also compatible with the Code 39 full ASCII format.

Example

If you want to emulate the keystroke sequence:

Alt + fx (close Word file)

The bar code is encoded as *.Jfx.J* (Code 39 full ASCII).

To read this code correctly you MUST activate the special keys interpretation function AND Code 39 full ASCII format.

- Only for use with a USB or keyboard wedge cable.

emulated key	characters	emulated key	characters
DEL	.A	PF1	0A
ENTER	.B	PF2	0B
RETURN	.C	PF3	0C
SEND	.D	PF4	0D
FIELD +	.E	PF5	0E
FIELD EXIT	.F	PF6	0F
HOME	.G	PF7	0G
END	.H	PF8	0H
TAB	.I	PF9	0I
ALT	.J	PF10	0J
BACK TAB	.K	PF11	0K
BACKSPACE	.L	PF12	0L
right arrow	.M	PF13	0M
left arrow	.N	PF14	0N
up arrow	.O	PF15	0O
down arrow	.P	PF16	0P
CLEAR	.Q	PF17	0Q
FIELD -	.R	PF18	0R
DUP	.S	PF19	0S
ESC	.T	PF20	0T
LINE FEED	.U	PF21	0U
RESET	.V	PF22	0V
CTRL	.W	PF23	0W
SHIFT	.X	PF24	0X

Code 39 - Special keys interpretation - Disable (*)

<SW>425F00

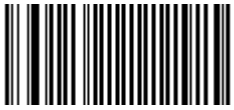
Code 39 - Special keys interpretation - Enable

<SW>425F01

• Code 93 / Code 93i

- Code 93
  Alphanumeric full ASCII symbology - letter case defined.
- Code 93i (encompasses and extends Code 93)
  Alphanumeric, full and extended ASCII, all Unicode characters, etc.

Code 93 / Code 93i - Disable (*)



<SW>414000

Code 93 / Code 93i - Enable

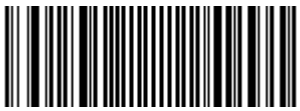
<SW>414001

• Symbology identifier

• User defined

- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or deactivate UDSI transmission.
- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

Code 93 / Code 93i - Symbology identifier - User defined - B6 (*)



<SW>41C000024236

• Code mark

Code 93 / Code 93i - Symbology identifier - Code mark - D (*)

<SW>414844

• Barcode length

- Use the L1 as minimum length option if you know the minimum length of the codes in your application!!!
- To optimize decoding performance and increase security, select the same length as the minimum length in your application (do not select a shorter length!!).

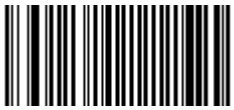
Length = [barcode data]

- Minimum length possible = 1 character.

• Length mode

- L1 = Codes with as many characters as specified by L1 and longer are read (L2 and L3 are not used).
- L2 = Only codes that comply with the lengths specified by L1, L2, and L3 will be read.
- L3 = Codes at least the length specified by L1 and no longer than the maximum length specified by L2 are read (L3 is not used).

Code 93 / Code 93i - Barcode length - Length mode - L1 as Minimal length (*)



<SW>415300

Code 93 / Code 93i - Barcode length - Length mode - L1, L2, L3 as fixed length

<SW>415301

Code 93 / Code 93i - Barcode length - Length mode - L1 as min, L2 as max

<SW>415302

• Code 128 / GS1-128

- Alphanumeric full ASCII symbology - letter case defined.
- "GS1-128" = Code 128 with the FNC1 character in the first position

Code 128 / GS1-128 - Code 128 enable (*)

<SW>434001

Code 128 / GS1-128 - Code 128 disable

<SW>434000

Code 128 / GS1-128 - GS1-128 enable (*)

<SW>434201

Code 128 / GS1-128 - GS1-128 disable

<SW>434200

• Symbology identifier

• User defined

- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or deactivate UDSI transmission.

- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

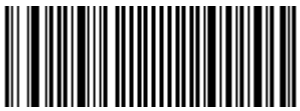
• Code 128

Code 128 / GS1-128 - Symbology identifier - User defined - Code 128 - B3 (*)

<SW>43C000024233

• GS1-128

Code 128 / GS1-128 - Symbology identifier - User defined - GS1-128 - C9 (*)



<SW>43C100024339

• Code mark

- See "Data transmission settings - symbology identifier - code mark" to activate or deactivate code mark transmission.
- Use the default value or compose your code mark for this symbology (1 character).

• Code 128

Code 128 / GS1-128 - Symbology identifier - Code mark - Code 128 - D (*)

<SW>434844

• GS1-128

Code 128 / GS1-128 - Symbology identifier - Code mark - GS1-128 - D (*)

<SW>434944

• GS1-128 identifier

- The]C1 AIM identifier for GS1-128 is automatically added by default in front of GS1-128 bar codes.

Code 128 / GS1-128 - GS1-128 identifier - Enable (*)

<SW>435801

Code 128 / GS1-128 - GS1-128 identifier - Disable

<SW>435800

• CIP 128 French pharmaceutical codes

- Embedded CIP 39 data.
- Fixed length of 14 characters.
- Code 128 character set C

Code 128 / GS1-128 - CIP 128 French pharmaceutical codes - Disable (*)

<SW>434C00

Code 128 / GS1-128 - CIP 128 French pharmaceutical codes - French CIP

<SW>434C01

• FNC1 separator character (GS1-128 norms)

- Default = GS function character (ASCII 29).
- Used as separator when multiple identifiers and their fields are concatenated.
- Example: Useful for keyboard wedge interfaces where the GS character can not be transmitted.

Code 128 / GS1-128 - FNC1 separator character (GS1-128 norms) - <GS> (*)

<SW>43591D

• Barcode length

- Use the L1 as minimum length option if you know the minimum length of the codes in your application!!!
- To optimize decoding performance and increase security, select the same length as the minimum length in your application (do not select a shorter length!!).

  Length = [barcode data]
- Minimum length possible = 1 character.
- Code 128 / GS1-128 does not use the same number of characters to code alphanumerical data and numerical data - if you can not read bar codes in your application, this may be due to an unsuitable minimum length - try entering a shorter length!

• Length mode

- L1 = Codes with as many characters as specified by L1 and longer are read (L2 and L3 are not used).
- L2 = Only codes that comply with the lengths specified by L1, L2, and L3 will be read.
- L3 = Codes at least the length specified by L1 and no longer than the maximum length specified by L2 are read (L3 is not used).

Code 128 / GS1-128 - Barcode length - Length mode - L1 as Minimal length (*)

<SW>435300

Code 128 / GS1-128 - Barcode length - Length mode - L1, L2, L3 as fixed length

<SW>435301

Code 128 / GS1-128 - Barcode length - Length mode - L1 as min, L2 as max

<SW>435302

• Reading tolerance

- Sets the tolerance level for reading hard to read bar codes.
- High = most permissive (reads codes of variable quality).
- Low = least permissive (only reads high quality codes that meet official Code 39 standards)

Code 128 / GS1-128 - Reading tolerance - High (*)

<SW>434F00

Code 128 / GS1-128 - Reading tolerance - Medium

<SW>434F01

Code 128 / GS1-128 - Reading tolerance - Low

<SW>434F02

• ISBT 128

- International Society of Blood Transfusion
- Activating ISBT 128 deactivates Code 128 / GS1-128 (to avoid confusion with Code 128 / GS1-128).
- You can re-activate Code 128 or GS1-128 by using the corresponding setup command if desired.
- IMPORTANT:
  - Codes are not concatenated by default (default transmission setting is "single codes only").
  - You must select one of the "concatenated codes" transmission options to send concatenated codes (see "transmit" section).

Code 128 / GS1-128 - ISBT 128 - Disable (*)

<SW>434100

Code 128 / GS1-128 - ISBT 128 - active

<SW>434101434000434200

• transmit

- IMPORTANT:
  - Codes are not concatenated by default (default transmission setting is "single codes only").
  - You must select one of the "concatenated codes" transmission options to send concatenated codes (see "transmit" section).

Code 128 / GS1-128 - ISBT 128 - transmit - Disable (*)

<SW>435A00

Code 128 / GS1-128 - ISBT 128 - transmit - Only transmit concatenated codes

<SW>435A01

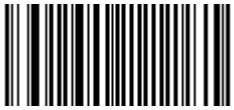
Code 128 / GS1-128 - ISBT 128 - transmit - Transmit concatenated codes or single codes

<SW>435A02

• concatenate

- IMPORTANT:
  - Codes are not concatenated by default (default transmission setting is "single codes only").
  - You must select one of the "concatenated codes" transmission options to send concatenated codes (see "transmit" section).

Code 128 / GS1-128 - ISBT 128 - concatenate - Disable (only those specified by datasheet) (*)



<SW>435B00

Code 128 / GS1-128 - ISBT 128 - concatenate - Enable

<SW>435B01

• GTIN processing

- GTIN = Global Trade Item Number.
- GTIN processing transmits GS1-128 as the 14 character GS1 Composite GTIN.
- To use GTIN processing you must also activate the GS1-128 symbology.
- IMPORTANT: when GS1-128 and GTIN processing are both activated it is not

possible to read normal GS1-128 codes.

Code 128 / GS1-128 - GTIN processing - Disable (*)

<SW>436000

Code 128 / GS1-128 - GTIN processing - Enable

<SW>436001

• Unconventional GS1-128

- You can activate the 3 options separately or use them together.
- Unconventional GS1-128 = Can decode unconventional GS1-128 (GS1-128 with 2 FNC1 chars)
- FNC2 append disabled = instructs the scanner to store data from the bar code containing the FNC2 and trnsmit it as a prefix to the date of the next bar code.
- FNC4 ASCII extension disabled = FNC4 automatically uses an extended ASCII char. This option disables this function.

• Reading range

- Applies a special algorithm for long-distance reading (default setting).
- Use the "normal" setting if distance reading is not required.

Code 128 / GS1-128 - Reading range - Normal

<SW>434700

Code 128 / GS1-128 - Reading range - Extended (*)

<SW>434701

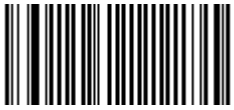
• DataMatrix

- Two-dimensional symbology.
- Only available with models equipped with an area imager.
- Can encode up to approximately 2 000 characters.
- Negative image DataMatrix supported.
- Mirror image DataMatrix not supported.

DataMatrix - Enable (*)

<SW>544001

DataMatrix - Disable



<SW>544000

• Symbology identifier

• User defined

- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or deactivate UDSI transmission.
- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

DataMatrix - Symbology identifier - User defined - D0 (*)

<SW>54C000024430

• Code mark

- See "Data transmission settings - symbology identifier - code mark" to activate or deactivate code mark transmission.
- Use the default value or compose your code mark for this symbology (1 character).

DataMatrix - Symbology identifier - Code mark - * (*)

<SW>54482A

• Mirrored labels activation

- When enabled mirrored labels can be read as well as normal labels.
- When disabled only normal labels can be read.

DataMatrix - Mirrored labels activation - disabled (*)

<SW>544300

DataMatrix - Mirrored labels activation - enabled

<SW>544301

• Structured append

DataMatrix - Structured append - Disable (*)

<SW>544500

DataMatrix - Structured append - Enable

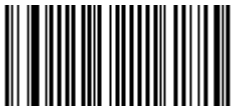
<SW>544501

• Header transmission

DataMatrix - Structured append - Header transmission - Disable (*)

<SW>544600

DataMatrix - Structured append - Header transmission - Enable



<SW>544601

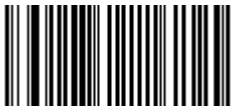
• Dutch Post

- 4-State postal barcode.
- Only available with models equipped with an area imager.

Dutch Post - Disable (*)

<SW>364000

Dutch Post - Enable



<SW>364001

• Symbology identifier

• User defined

- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or deactivate UDSI transmission.
- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

Dutch Post - Symbology identifier - User defined - P4 (*)

<SW>36C000025034

• Code mark

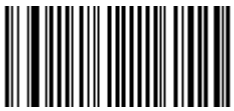
Dutch Post - Symbology identifier - Code mark - * (*)

<SW>36482A

• EAN/UPC

Numerical symbology.

EAN/UPC - UPC-A enable (*)



<SW>4B4001

EAN/UPC - UPC-A disable

<SW>4B4000

EAN/UPC - UPC-E enable (*)

<SW>4B4101

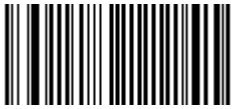
EAN/UPC - UPC-E disable

<SW>4B4100

EAN/UPC - EAN-8 enable (*)

<SW>4B4201

EAN/UPC - EAN-8 disable

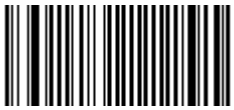


<SW>4B4200

EAN/UPC - EAN-13 enable (*)

<SW>4B4301

EAN/UPC - EAN-13 disable

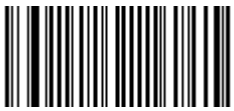


<SW>4B4300

• UPC-E1

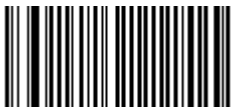
- Irregular UPC-E with number system equal to 1 (usually the first printed character).
- UPC-E must be active for UPC-E1 to be taken into account.

EAN/UPC - UPC-E1 - Enable



<SW>4B4C01

EAN/UPC - UPC-E1 - Disable (*)



<SW>4B4C00

• Symbology identifier

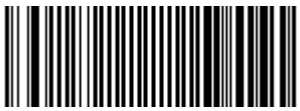
• User defined

- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or

deactivate UDSI transmission.
- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

• UPC-A

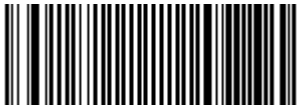
EAN/UPC - Symbology identifier - User defined - UPC-A - A0 (*)



<SW>4BC000024130

• UPC-E

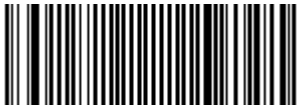
EAN/UPC - Symbology identifier - User defined - UPC-E - E0 (*)



<SW>4BC100024530

• EAN-8

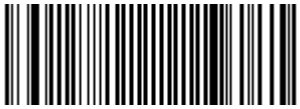
EAN/UPC - Symbology identifier - User defined - EAN-8 - FF (*)



<SW>4BC200024646

• EAN-13

EAN/UPC - Symbology identifier - User defined - EAN-13 - F (*)



<SW>4BC3000146

• Code mark

• UPC-A

EAN/UPC - Symbology identifier - Code mark - UPC-A - A (*)

<SW>4B4841

• UPC-E

EAN/UPC - Symbology identifier - Code mark - UPC-E - E (*)

<SW>4B4945

• EAN-8

EAN/UPC - Symbology identifier - Code mark - EAN-8 - N (*)

<SW>4B4A4E

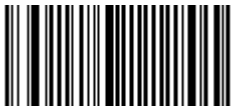
• EAN-13

EAN/UPC - Symbology identifier - Code mark - EAN-13 - F (*)

<SW>4B4B46

• Add-on digits

EAN/UPC - Add-on digits - not required but transmitted if read (*)



<SW>4B5D00

EAN/UPC - Add-on digits - required and transmitted

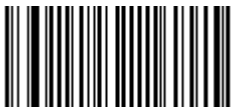
<SW>4B5D01

• add-on 2

EAN/UPC - Add-on digits - add-on 2 - Disable (*)

<SW>4B4500

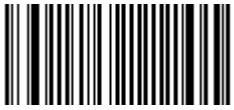
EAN/UPC - Add-on digits - add-on 2 - Enable



<SW>4B4501

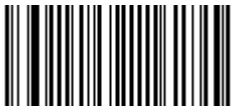
• add-on 5

EAN/UPC - Add-on digits - add-on 5 - Disable (*)



<SW>4B4600

EAN/UPC - Add-on digits - add-on 5 - Enable



<SW>4B4601

• security level

- Used with "add-on not required but transmitted if read" option.
- Defines security level for add-on 2 and add-on 5 (range 0 to 100).
- Higher security level = lower decode rate.

EAN/UPC - Add-on digits - security level - 10 (*)

<SW>4B470A

• Check digit transmission

• UPC-A

EAN/UPC - Check digit transmission - UPC-A - Enable (*)

<SW>4B5401

EAN/UPC - Check digit transmission - UPC-A - Disable

<SW>4B5400

• UPC-E

EAN/UPC - Check digit transmission - UPC-E - Enable (*)

<SW>4B5501

EAN/UPC - Check digit transmission - UPC-E - Disable

<SW>4B5500

• EAN-8

EAN/UPC - Check digit transmission - EAN-8 - Enable (*)

<SW>4B5601

EAN/UPC - Check digit transmission - EAN-8 - Disable

<SW>4B5600

• EAN-13

EAN/UPC - Check digit transmission - EAN-13 - Enable (*)

<SW>4B5701

EAN/UPC - Check digit transmission - EAN-13 - Disable

<SW>4B5700

• UPC number system

• UPC-A

EAN/UPC - UPC number system - UPC-A - Enable (*)

<SW>4B5801

EAN/UPC - UPC number system - UPC-A - Disable

<SW>4B5800

• UPC-E

EAN/UPC - UPC number system - UPC-E - Enable (*)

<SW>4B5901

EAN/UPC - UPC number system - UPC-E - Disable

<SW>4B5900

• Re-encoding UPC-A, UPC-E, EAN-8

[leading character] [number system] [data] [check digit]

- Converts decoded data to other code formats.
- Transmission only takes into account the parameters available for the target bar code format.
- Regular UPC-A has a transmitted number system equal to 0.
- To transmit the additional leading character (country code), select the "UPC-A transmitted as EAN-13" option.

EAN/UPC - Re-encoding UPC-A, UPC-E, EAN-8 - UPC-A transmitted as EAN-13 (*)

<SW>4B5A01

EAN/UPC - Re-encoding UPC-A, UPC-E, EAN-8 - UPC-A transmitted as UPC-A

<SW>4B5A00

EAN/UPC - Re-encoding UPC-A, UPC-E, EAN-8 - UPC-E transmitted as UPC-E (*)

<SW>4B5B00

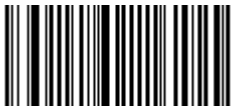
EAN/UPC - Re-encoding UPC-A, UPC-E, EAN-8 - UPC-E transmitted as UPC-A

<SW>4B5B01

EAN/UPC - Re-encoding UPC-A, UPC-E, EAN-8 - EAN-8 transmitted as EAN-8 (*)

<SW>4B5C00

EAN/UPC - Re-encoding UPC-A, UPC-E, EAN-8 - EAN-8 transmitted as EAN-13



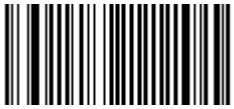
<SW>4B5C01

• ISBN

- International Standard Book Number

- EAN-13 code, the first 3 characters "978" or "979" (except for "9790") are ignored and the checksum (0..9, "X") is calculated on the remaining characters.

EAN/UPC - ISBN - Disable (*)



<SW>4B4400

EAN/UPC - ISBN - Enable

<SW>4B4401

• ISMN

- International Standard Music Number
- EAN-13 code starting with "9790", the first 3 characters "979" are ignored and the first "0" is converted to "M"

EAN/UPC - ISMN - Disable (*)

<SW>4B6100

EAN/UPC - ISMN - Enable

<SW>4B6101

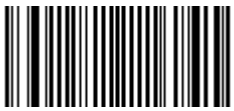
• ISSN

- International Standard Serial Number
- EAN-13 code, the first 3 characters "977" are ignored and the ISBN checksum (0..9, "X") is calculated on the remaining characters.

EAN/UPC - ISSN - Disable (*)

<SW>4B6200

EAN/UPC - ISSN - Enable



<SW>4B6201

• GTIN processing

- GTIN = Global Trade Item Number.
- GTIN processing transmits EAN/UPC as the 14 character GS1 Composite GTIN.
- To use GTIN processing you must also activate the desired EAN/UPC symbologies.

EAN/UPC - GTIN processing - Disable (*)

<SW>4B6000

EAN/UPC - GTIN processing - Enable

<SW>4B6001

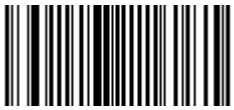
• Reading range

- Applies a special algorithm for long-distance reading (default setting).
- Use the "normal" setting if distance reading is not required.

EAN/UPC - Reading range - Normal

<SW>4B4D00

EAN/UPC - Reading range - Extended (*)



<SW>4B4D01

• GS1 Composite

• CC-A/B

GS1 Composite - CC-A/B - Disable (*)

<SW>564000

GS1 Composite - CC-A/B - Enable

<SW>564001

• CC-C

GS1 Composite - CC-C - Disable (*)

<SW>564100

GS1 Composite - CC-C - Enable

<SW>564101

• EAN/UPC composite message decoding

- Only applied to composite codes based on EAN/UPC.

GS1 Composite - EAN/UPC composite message decoding - Autodiscriminate (imager only) (*)

<SW>565E02

GS1 Composite - EAN/UPC composite message decoding - Always linked

<SW>565E01

GS1 Composite - EAN/UPC composite message decoding - Never linked

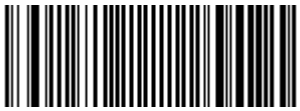
<SW>565E00

• Symbology identifier

• User defined

• CC-A/B

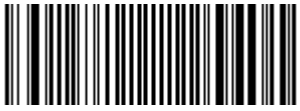
GS1 Composite - Symbology identifier - User defined - CC-A/B - G0 (*)



<SW>56C000024730

• CC-C

GS1 Composite - Symbology identifier - User defined - CC-C - G1 (*)



<SW>56C100024731

• Code mark

- See "Data transmission settings - symbology identifier - code mark" to activate or deactivate code mark transmission.
- Use the default value or compose your code mark for this symbology (1 character).

• CC-A/B

GS1 Composite - Symbology identifier - Code mark - CC-A/B - * (*)

<SW>56482A

• CC-C

GS1 Composite - Symbology identifier - Code mark - CC-C - * (*)

<SW>56492A

• Linear transmission only

- Applied to all composite codes.
- Allows you to decide to only transmit the linear code.

GS1 Composite - Linear transmission only - Disable (*)

<SW>564400

GS1 Composite - Linear transmission only - Enable

<SW>564401

• Unconventional

When enabled the AIM identifier is always removed.

GS1 Composite - Unconventional - Disabled (*)

<SW>564500

GS1 Composite - Unconventional - Enabled

<SW>564501

• GS1 DataBar (RSS)

• Omni-directional

- Numerical symbology.
- Reads the following types of GS1 DataBar:
  GS1 DataBar Omni-Directional
  GS1 DataBar Truncated
  GS1 DataBar Stacked
  GS1 DataBar Stacked Omni-Directional

GS1 DataBar (RSS) - Omni-directional - Enable

<SW>4F4001

GS1 DataBar (RSS) - Omni-directional - Disable (*)

<SW>4F4000

• Symbology identifier

• User defined

- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or deactivate UDSI transmission.
- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

GS1 DataBar (RSS) - Omni-directional - Symbology identifier - User defined - C3 (*)

<SW>4FC000024333

• Code mark

GS1 DataBar (RSS) - Omni-directional - Symbology identifier - Code mark - * (*)

<SW>4F482A

• Limited

GS1 DataBar (RSS) - Limited - Enable

<SW>4F4101

GS1 DataBar (RSS) - Limited - Disable (*)

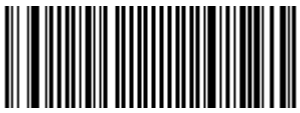
<SW>4F4100

• Symbology identifier

• User defined

- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or deactivate UDSI transmission.
- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

GS1 DataBar (RSS) - Limited - Symbology identifier - User defined - C4 (*)



<SW>4FC100024334

• Code mark

GS1 DataBar (RSS) - Limited - Symbology identifier - Code mark - * (*)

<SW>4F492A

• Expanded

GS1 DataBar (RSS) - Expanded - Enable

<SW>4F4201

GS1 DataBar (RSS) - Expanded - Disable (*)

<SW>4F4200

• Symbology identifier

• User defined

- User defined symbology identifier.
- See "Data transmission settings - symbology identifier - UDSI" to activate or deactivate UDSI transmission.
- Use the default value or compose your custom symbology identifier for this symbology (1 - 4 characters).

GS1 DataBar (RSS) - Expanded - Symbology identifier - User defined - C5 (*)

<SW>4FC200024335

• Code mark

- See "Data transmission settings - symbology identifier - code mark" to activate or deactivate code mark transmission.
- Use the default value or compose your code mark for this symbology (1 character).

GS1 DataBar (RSS) - Expanded - Symbology identifier - Code mark - * (*)

<SW>4F4A2A

Operating Settings

- Settings that affect the way your product operates (trigger settings, flashing mode, data decoding security settings, beep characteristics, etc.).

• Pre-defined trigger modes

- These are pre-defined trigger settings used to quickly set up your scanner.
- If you are using a pre-defined mode, do not set the other Scanning/triggering settings.

One pull and release turns the aimer, illumination and decoding on. If no decode, second pull and release turns the aimer, illumination and decoding off.

Pre-defined trigger modes - Toggle

<CCMD>405100

One pull turns on the aimer, illumination and decoding. If not decode, aimer, illumination and decoding turn off when the trigger is released.

Pre-defined trigger modes - Level

<CCMD>405101

One pull turns on the aimer only. When the trigger is released, illumination and decoding turn on. If no decode, second pull and release turn the aimer, illumination and decoding off.

Pre-defined trigger modes - Aim

<CCMD>405102

• Scanning / Triggering

• Triggering modes

At power up the lighting and decoding are on all the time. The trigger is not

used.

Scanning / Triggering - Triggering modes - Continuous

<SW>704000

Lighting and decoding are on when the trigger line is activated (trigger pressed) and off when the trigger line is deactivated (trigger released).

Scanning / Triggering - Triggering modes - Level (*)

<SW>704001

Lighting and decoding are on when the trigger line is activated (trigger pressed) and stay on until a period of inactivity lasting the time specified by the trigger timeout.
- After the timeout lighting and decoding are turned off.

Scanning / Triggering - Triggering modes - Pulse

<SW>704002

At power up the lighting and decoding are on (no need to activate the trigger line) and after a period of inactivity lasting the time specified by the trigger timeout, the scanner starts flashing, checking for a bar code to be read.
- When a bar code is detected, the lighting and decoding automatically turn on and stay on until another period of inactivity (timeout), after the timeout the scanner starts flashing again.

Scanning / Triggering - Triggering modes - Flashing

<SW>704003

Autostand triggering mode switches from Level to Flashing (1D models) or Presentation (2D models).
- At power up the scanner is in Flashing or Presentation trigger mode (no need to activate the trigger line). You can put a bar code in front of the scanner and it will be scanned.
- To switch to Level activate the trigger line (press the trigger). You can scan bar codes by pulling the trigger.
- When in Level trigger mode, after a period of inactivity lasting the time specified by the trigger timeout, the scanner switches back to Flashing mode.

Scanning / Triggering - Triggering modes - Autostand

<SW>704004

Aimer and decoding is on when trigger line is activated. Activating the trigger line again turns the aimer and decoding off.

Scanning / Triggering - Triggering modes - Toggle

<SW>704005

At power up lighting and decoding are on.
- After a period of inactivity lasting the time specified by the trigger timeout, the lighting turns off or is dimmed (depending on the scanner used).
- When a new bar code is presented the lighting and decoding restart and stay on until another period inactivity.
- The trigger can be used in Presentation mode - when you pull the trigger the scanner functions as if it were in Level mode.
- Only available with 2D models.

Scanning / Triggering - Triggering modes - Presentation

<SW>704006

• Presentation threshold

- Only available on 2D models.
- Use this setting when in Presentation Triggering mode to regulate how sensitive the imager is to movement which automatically wakes up the scanner.
- The higher the value = the stronger the movement is needed to wake up the scanner.

Scanning / Triggering - Presentation threshold - 50 (*)

<SW>704932

• Trigger timeout (sec)

- The trigger timeout is used in the following trigger modes:
  - Pulse
  - Flashing
  - Autostand
- Value in seconds

Scanning / Triggering - Trigger timeout (sec) - 2 (*)

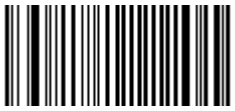
<SW>70800002

• Trigger activation

- Used to enable or disable hardware or emulated triggers.
- IMPORTANT: You cannot activate the trigger line if the hardware trigger is disabled. If you are using level or pulse trigger modes, the only way to re-activate the hardware trigger is by using online set up (ISCP terminal) or sending an ISCP command.

Hardware and emulated triggers are disabled. The only way to turn the imager on is by sending a decode on/decode off control command (20, 40).

Scanning / Triggering - Trigger activation - Disabled



<SW>704100

Hardware trigger ONLY is enabled.

Scanning / Triggering - Trigger activation - Hardware trigger enabled

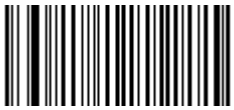
<SW>704101

Emulated trigger ONLY is enabled.
- The trigger can only be activated by sending the emulated trigger ISCP control command 50, 47.

Scanning / Triggering - Trigger activation - Emulated trigger enabled

<SW>704102

Scanning / Triggering - Trigger activation - Hardware and emulated trigger enabled (*)



<SW>704103

• Software Trigger

- Reading controlled by "start read" / "stop read" characters received from the host system.
- This option is NOT compatible with ISCP.

Scanning / Triggering - Software Trigger - Disable (*)

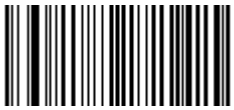
<SW>704200

- Start read character default = STX
- Stop read character default = ETX
- This option is NOT compatible with ISCP.

Scanning / Triggering - Software Trigger - Enable

<SW>704201

Scanning / Triggering - Software Trigger - start character [STX] (02h) (*)



<SW>704302

Compose start character

Scanning / Triggering - Software Trigger - stop character [ETX] (03h) (*)

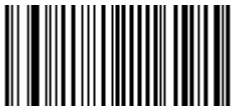
<SW>704403

Compose stop character

- **Turn off after good read**

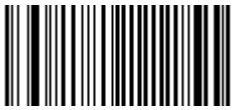
- When active, the scan engine stops the reading session after a successful decoding.
- Turn off after good read is only used in the following trigger modes:
  - Level
  - Pulse
  - Autostand
  - Standard Aim
- NOTE: this parameter is NOT used with continuous and flashing modes.

Scanning / Triggering - Turn off after good read - Enable (*)



<SW>704601

Scanning / Triggering - Turn off after good read - Disable



<SW>704600

• Retrigger delay

- Only valid if "Turn off after good read" is disabled.
- This setting is a time delay in which the scanner turns off after a good read. When the delay is done, the scanner automatically turns back on (retriggers).
- Value is in milliseconds.

Scanning / Triggering - Turn off after good read - Retrigger delay - 0 (*)

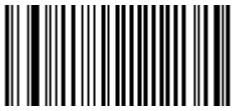
<SW>70860000

• Aimer mode

- Allows you to locate the bar code you want to read.
- The aiming beam is only used with the following trigger modes:
  - Level
  - Pulse
  - Autostand
  - Toggle*

-NOTE*: In Toggle trigger mode, "one pull aim, one pull read" does not work as stated. Instead one pull turns on the aimer only. When the trigger is released decoding begins. If no decode, second pull turns aimer and decoding off.

Scanning / Triggering - Aimer mode - Typical aimer (*)



<SW>704500

Scanning / Triggering - Aimer mode - One pull aim and read

<SW>704501

Scanning / Triggering - Aimer mode - One pull aim, second pull read

<SW>704502

- **Duration**

- Duration is applied differently depending on the aiming beam mode:
- First pull aim and read:
    - Duration is the time the aiming beam stays on before reading begins
- First pull aim, second pull read:
    - Duration is the maximum time between the first pull and second pull
    - If you wait longer than the duration before the second pull, the cycle starts over with the aiming beam.

Scanning / Triggering - Aimer mode - Duration (ms) - 500 (*)

<SW>708101F4

Scanning / Triggering - Aimer mode - Duration (ms) - 1200

<SW>708104B0

• Bad read message

• Activation

- Sends a message to the host if the read is unsuccessful.
-

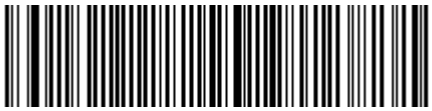
Scanning / Triggering - Bad read message - Activation - Disable (*)

<SW>604100

Scanning / Triggering - Bad read message - Activation - Enable

<SW>604101

Scanning / Triggering - Bad read message - Compose - NOREAD (*)



<SW>60C200064E4F52454144

• Ignore stand detect

Enable ignore stand detect when you want to use Autostand triggering mode with and you are not using a detectable stand (charge base or Bluetooth base station).

Scanning / Triggering - Ignore stand detect - disable (*)

<SW>704A00

Scanning / Triggering - Ignore stand detect - enable

<SW>704A01

• Double scan prevention

- When enabled pulling the trigger a second time does not start a new reading session unless the timeout has expired. This prevents the user from accidentally scanning the same bar code twice.
- Use the "Timeout between identical consecutive codes" located in "Data decoding security" to set the timeout.
- Note: The default value of the timeout is not suitable for double scan prevention. Be sure to adjust it if using this feature.

Scanning / Triggering - Double scan prevention - Disable (*)

<SW>705000

Scanning / Triggering - Double scan prevention - Enable

<SW>705001

• Data decoding security

- Ensures correct transmission of data for difficult reading conditions and varying levels of barcode quality (poorly printed labels, variable lengths and no check digit, "fragile" symbologies).
- Increasing the security level reduces the reading speed !!!

• Predefined security levels

- Predefined security level settings can be modified individually
- Use medium and high security levels for poor-quality bar codes or critical applications.
- Increasing the security level reduces the reading speed!!!

- Auto read count before transmission.
- 300 ms between identical consecutive codes.
- No timeout between different consecutive codes.

Data decoding security - Predefined security levels - Normal (*)

<SW>7140007180012C71810000

2 consecutive same reads before transmission.
- 300 ms between identical consecutive codes.
- 10 ms between different consecutive codes.

Data decoding security - Predefined security levels - Medium

<SW>7140027180012C7181000A

4 consecutive same reads before transmission.
- 350 ms between identical consecutive codes.
- 30 ms between different consecutive codes.

Data decoding security - Predefined security levels - High

<SW>7140047180015E7181001E

• Consecutive same read data validation

- Data is only transmitted after repeated reads give the same result.

Data decoding security - Consecutive same read data validation - Auto read count before transmission

<SW>714000

Data decoding security - Consecutive same read data validation - Single read before transmission

<SW>714001

Compose number of same reads

• Timeout between different consecutive codes (ms)

- Prevents reading the same bar code more than once.
- Value is milliseconds.

• Timeout between different consecutive codes (ms)

- Prevents unwanted reading of other bar codes on the same label.

Data decoding security - Timeout between different consecutive codes (ms) - 0 (*)

<SW>71810000

• Center decoding

- When enabled the scanner reads only the bar code that the laser aimer is aimed at.
- This is helpful when reading bar codes that are positioned close together.

• Activation

Data decoding security - Center decoding - Activation - Disable (*)

<SW>714100

Data decoding security - Center decoding - Activation - Enable

<SW>714101

• Tolerance

- The tolerance level for center decoding allows you to aim the laser close to the bar code to be read rather than be positioned on the bar code.
- 0 = No tolerance (laser aimer must be positioned on the bar code to be read), 100 = most permissive (laser aimer can be positioned beside the bar code to be read).

Data decoding security - Center decoding - Tolerance - No tolerance (*)

<SW>714200

• Bar code sequence

- Bar code sequence allows you to read up to 10 bar codes with one trigger pull. This is useful when reading several bar codes placed closely together and without re-reading the same code twice.
- For example, if set to 2, pull the trigger once and scan both codes. The scanner beeps for each code that is decoded (2). If "turn off after good read" is enabled the scanner turns off AFTER the last bar code in the sequence is read.
- Compose the number of bar codes for the sequence.

Data decoding security - Bar code sequence - 1 (*)

<SW>714301

• Beeps / LEDs

• Note (tone frequency)

Beeps / LEDs - Note (tone frequency) - high (*)

<SW>7280082A

Beeps / LEDs - Note (tone frequency) - low

<SW>72800526

Beeps / LEDs - Note (tone frequency) - medium

<SW>728006E0

• Power-up beeps

2 beeps = successful power-up
3 long beeps = EEPROM integrity error (contact your Intermec representative !).

Beeps / LEDs - Power-up beeps - Disable (*)

<SW>724000

Beeps / LEDs - Power-up beeps - Enable

<SW>724001

- **Good read beeps**

- **Number**

- "Normal" bar codes: 1 beep (default) = good read
- Configuration codes: 2 beeps = good read, 6 beeps = setup error, 3 long beeps = EEPROM integrity error (contact your Intermec representative !).

Beeps / LEDs - Good read beeps - Number - 1 beep (*)

<SW>724101

Beeps / LEDs - Good read beeps - Number - 2 beeps

<SW>724102

Beeps / LEDs - Good read beeps - Number - None

<SW>724100

- **Duration**

- Value is in milliseconds

Beeps / LEDs - Good read beeps - Duration - 60

<SW>7281003C

Beeps / LEDs - Good read beeps - Duration - 80 (*)

<SW>72810050

Beeps / LEDs - Good read beeps - Duration - 200

<SW>728100C8

Beeps / LEDs - Good read beeps - Duration - 300

<SW>7281012C

- **Timing**

- IBM and OCIA cash registers: do not send this parameter online to the scan engine through RS-232 cable 0-364032-10!!! Send it to the setup sheet and read the configuration code with your normal IBM / OCIA product cable connected.

Beeps / LEDs - Good read beeps - Timing - During transmission (*)

<SW>724202

Beeps / LEDs - Good read beeps - Timing - Before transmission

<SW>724200

Beeps / LEDs - Good read beeps - Timing - After transmission

<SW>724201

- **Good read LED duration**

- "Read" LED green = "good read"
- Setting a duration of 0 ms = "no good read LED"
- Value is in milliseconds.

Beeps / LEDs - Good read LED duration - 80 (*)

<SW>72820050

Beeps / LEDs - Good read LED duration - 500

<SW>728201F4

Beeps / LEDs - Good read LED duration - 1000

<SW>728203E8

Beeps / LEDs - Good read LED duration - 2500

<SW>728209C4

Beeps / LEDs - Good read LED duration - 5000

<SW>72821388

Disable/enable all good read signals

- This setting can be used to disable all good read signals: Beep, LED and vibrate.

Beeps / LEDs - Disable/enable all good read signals - Disable

<SW>725100

Beeps / LEDs - Disable/enable all good read signals - Enable (*)

<SW>725101

- **Error beep**

Beeps / LEDs - Error beep - Enable (*)

<SW>724301

Beeps / LEDs - Error beep - Disable

<SW>724300

- **Setup beep and LED**

Beeps / LEDs - Setup beep and LED - Enable (*)

<SW>724401

Beeps / LEDs - Setup beep and LED - Disable

<SW>724400

- **Multicode beeps**

- By default the scanner does not beep when reading several bar codes when using the Multicode function (see Symbologies). Use this setting to activate beeps when reading bar codes that are part of a Multicode.

Beeps / LEDs - Multicode beeps - None (*)

<SW>725000

Beeps / LEDs - Multicode beeps - Good Read Beep

<SW>725001

Beeps / LEDs - Multicode beeps - Shorter Beep

<SW>725002

Configuration Modes And Utilities

Get version info.

Get firmware version

<STR>30C0

Get decode version info.

Get decode version

<STR>30C2

Get all component versions.

Get sub-system versions

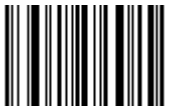
<STR>30C4

Necessary for upgrade of product firmware.

- Use the Intermec Firmware Download Wizard to upgrade your product (available from the cd-rom or web, can be run from EasySet "Tools" menu if installed in "download" subdirectory in EasySet directory).
- Reading this code prepares the product for firmware upgrade but inhibits normal operation (restart the product to resume normal operation).
- Do not send this command directly from EasySet to your product - you must read this command as a configuration code (send to the setup sheet and print out)!
- See section 1 "Using EasySet" for details on how to connect up for firmware

upgrade with RS-232 cable

firmware upgrade with an RS-232 cable



<CCMD>3001

• Optical setup (using configuration bar codes)

Use configuration bar codes to set up the product.

Configuration with bar codes possible all the time.

Optical setup (using configuration bar codes) - Always enabled (*)

<SW>744000

Protects the product against unwanted configuration by bar code.
- Configuration with bar codes only possible before end of 1 minute timeout (cycle repeated until no config code read within 1 minute).

Optical setup (using configuration bar codes) - Inhibit after 1 mn

<SW>744001

• Transparent configuration mode

- Allows you to use your scanner to set up other products (setup commands are transmitted to the other product but do not affect your scanner).
- Read unconcatenated configuration codes from the setup sheet to set up another product in transparent configuration mode (not possible with EasySet online).

Transparent configuration mode - Disable (*)

<SW>744100

Transparent configuration mode - Enable

<SW>744101