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Wireless Pocket 2D Imager Scanner

- MS920 -

User's Manual

Version 2.0

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Overview

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.

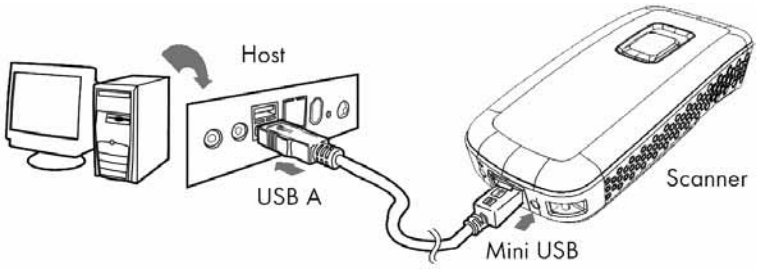
2. Please charge scanner for at least 2 hours prior to initial use.

Scanner Detail

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.

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	330 ft(100m),class 1
Operating Temp	0 to 50°C (32°F to 122°F)
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

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Chapter 2

Bluetooth Function Setting

Pairing With PC/Notebook For The First Time

PC (HID mode)

Following steps are based on Microsoft Windows 7.

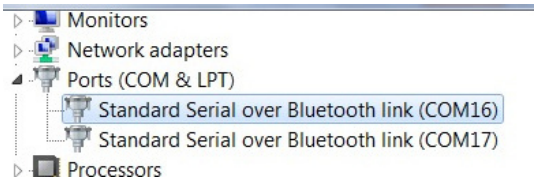
1. Use MS920 to scan barcode “HID”.
2. Open Devices and Printers by clicking the Start button , and then, on the Start menu, clicking Devices and Printers.
3. Click Add a device, and then follow the instructions.
4. Click the Bluetooth enabled device (Unitech BT XXXXXX) you want to add to your computer, 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 AXXXXXX** icon.
4. Open HyperTerminal, and select ingoing com part to make connection.



5. After one beep, start the scan then.

Buffer Mode

Auto Batch*

Inventory

No Buffer

No Buffer saved in the memory.

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

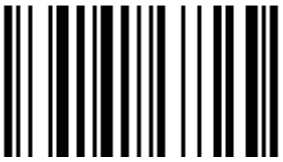
1. From the Home screen, choose Settings > Bluetooth and turn Bluetooth on.
2. Choose Unitech BT XXXXXX, and then enter pairing code “0000” if prompted.

Android Device

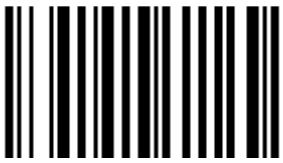
1. From the Home screen, choose Settings and goes to configurations for Bluetooth and turn Bluetooth on.
2. Choose Unitech BT XXXXXX, and then enter pairing code “0000” if prompted.

Factory Default

Display F/W Version



BT Un-pair



iOS Keypad

Press the trigger once will display the keypad, press twice will be disappeared.

Inventory Space Left

Check the memory size.

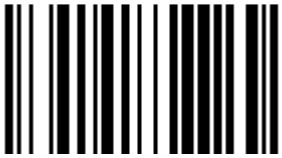
Beep on Good Road (Toggle)

Beep on Connection Charge (Toggle)

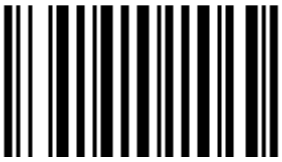
Buffer Erasing

Inventory Mode

1. Scan (Erase Inventory Buffer) .



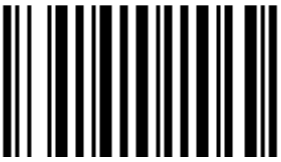
2. Scan (Erase)



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.

Erase Previous Entry

Erase the last data.

Power Saving

Enabled*
(Good for scan with trigger)

Disabled
(Good for continuous scanning)

BT Module Power Saving (Power off BT while no activities)

1 Minute*

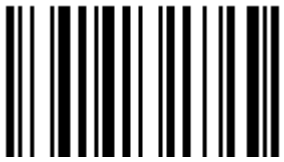
3 Minutes

5 Minutes

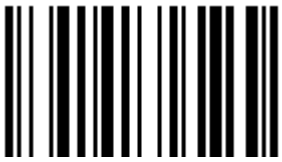
HID Keyborad Character Delay

1 ms

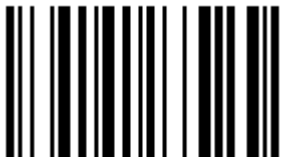
5 ms



10 ms

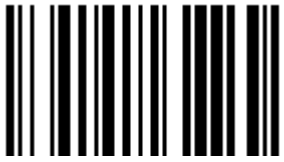


20 ms



50 ms

100 ms



HID Keyborad Block Delay

10 ms

50 ms

100 ms

500 ms

1 Sec.

3 Sec.

HID Keyborad Case

Auto Trace

To Lower

To Upper

HID Keyborad Languages

US English

UK English

Swiss

Swedish

Norwegian

Italian

German

French

Danish

Partial ALT

Japanese

Spanish

ALT Mode

Enter BT Pairing Code

Enter 

Abort 

To scan "//7" label to enter code input mode, to scan "digit" as prompted on host, to scan "$M" to finish input and exit input mode. To scan "$P" to abort input and exit input mode.

Chapter 3

Symbologies

- 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

- Deactivates all the symbologies activated.
- Use the "not active" options to deactivate individual symbologies.
- Does not reset individual parameter settings for each symbology (when you reactivate a symbology, you recover the parameter settings stored in memory for that symbology when it was disabled - use reset factory defaults to reset all the symbology parameters to their factory default settings).

Disable all symbologies

Codabar

- Numerical symbology

Disable (*)

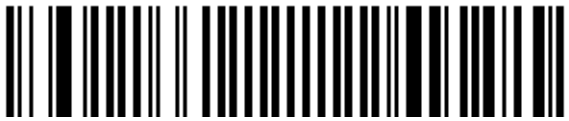
Enable

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)

B7 (*)



Compose: Please refer to SCM (Software Configuration Manager) in CD

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).

D (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

Start / Stop

Not transmitted (*)

a, b, c, d

A, B, C, D

Check digit

check digit verification

- AIM has a recommended check character for Codabar
- Each Codabar data character (including Start/Stop) has a value assigned to it:

  0 = 0 1 = 1 2 = 2 3 = 3 4 = 4 5 = 5 6 = 6 7 = 7 8 = 8 9 = 9 - = 10 $ = 11 : = 12 / = 13 , = 14 + = 15 A = 16 B = 17 C = 18 D = 19

- The values are added and the check is calculated:

  check = [(next multiple of 16) - (sum of assigned AIM values)]

  Example

  data characters: A 0 1 2 3 4 B

  AIM values = 16 + 0 + 1 + 2 + 3 + 4 + 17: 43

  next multiple of 16: 48

  check = 48 - 43: 5

  final message: A 0 1 2 3 4 5 B

Disable (*)

Enable

check digit transmissionr

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

Disable (*)

Enable

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] + [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."

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).

L1 as Minimal length (*)

L1, L2, L3 as fixed length

L1 as min, L2 as max

Set lengths 1, 2 and 3

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

Compose L1:

Compose L2:

Compose L3:

Codablock

- 2-dimensional alphanumerical symbology

Codablock A

Disable (*)

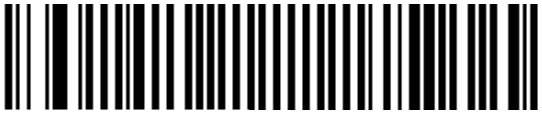
Enable

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).

K1 (*)



Compose: Please refer to SCM (Software Configuration Manager) in CD

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).

*(*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

Codablock F

Disable (*)

Enable

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)..

K1 (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

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).

*(*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

Code 11

- numerical symbology

Disable(*)

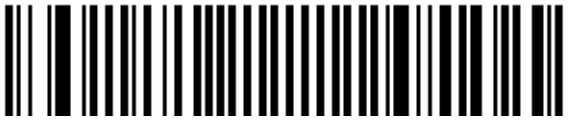
Enable

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).

C1 (*)



Compose: Please refer to SCM (Software Configuration Manager) in CD

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).

*(*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

Check digits

1 digit (*)

2 digits

Transmitted (*)

Not transmitted

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).

L1 as Minimal length (*)

L1, L2, L3 as fixed length

L1 as min, L2 as max

Set lengths 1, 2 and 3

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

Compose L1:

Compose L2:

Compose L3:

Code 39

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

Disable

Enamle(*)

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).

B1 (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

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).

*(*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

Format

Standard 43 characters (*)

Full ASCII (extended)

Start / Stop

Not transmitted (*)

Transmitted

accepted characters

'*' only (*)

'$' only

'$' only *'

Check digit

check digi verification

Disable (*)

Modulo 43

French CIP

Italian CPI

check digi transmission

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

Disable (*)

Enable

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] + [check digit] + [stop]
- Minimum length possible = 3

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).

L1 as Minimal length (*)

L1, L2, L3 as fixed length

L1 as Min, L2 and L3

Set lengths 1, 2 and 3

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

Compose L1:

Compose L2:

Compose L3:

Reading range

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

Extended (*)

Normal

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).

High (*)

Medium

Low

Unconventional Code 39

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

Disable (*)

Enable

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.

Disable (*)

Enable

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

Disable

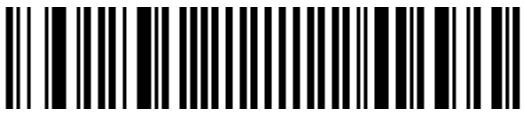
Enable (*)

Symbology indentifier

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).

B6 (*)



Compose: Please refer to SCM (Software Configuration Manager) in CD

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).

D (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

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 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).

L1 as Minimal length (*)

L1, L2, L3 as fixed length

L1 as min, L2 as max

Set lengths 1, 2 and 3

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

Compose L1:

Compose L2:

Compose L3:

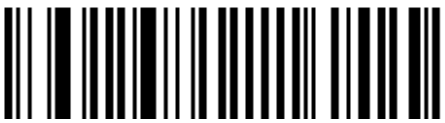
Code 128 / GS1-128

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

Code 128 enable (*)

Code 128 disable

GS1 - 128 enable (*)



GS1 - 128 disable

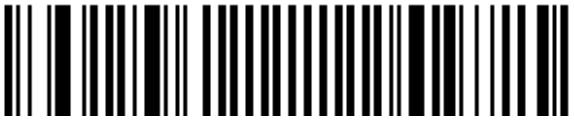
Symbology identifier

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

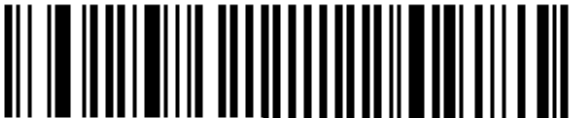
B3 (*)



Compose: Please refer to SCM (Software Configuration Manager) in CD

GS1 128

C9 (*)



Compose: Please refer to SCM (Software Configuration Manager) in CD

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

D (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

GS1 128

D (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

GS1 - 128 identifier

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

Enable (*)

Disable

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 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).

L1 as Minimal length (*)

L1, L2, L3 as fixed length

L1 as min, L2 as max

Set lengths 1, 2 and 3

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

Compose L1:

Compose L2:

Compose L3:

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).

High (*)

Medium

Low

Reading range

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

Extended (*)

Normal

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).

Disable (*)

Transmit

Disable (*)

Only transmit concatenated codes

Transmit concatenated codes or single codes

Concatenate

Disable (*)

Enable

DataMatrix

- Two-dimensional symbology.
- Only available with models equipped with an area imager.
- Can encode up to approximately 2000 characters.
- Negative image DataMatrix supported.
- Mirror image DataMatrix not supported.

Disable

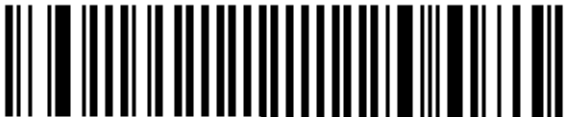
Enamle (*)

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).

D0 (*)



Compose: Please refer to SCM (Software Configuration Manager) in CD

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).

* (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

Mirrored labels activation

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

Disable (*)

Enable

Structured append

Disable (*)

Enable

Header transmission

Disable (*)

Enable

EAN / UPC

- Numerical symbology.

UPC - A enable (*)

UPC - A disable

UPC - E enable (*)

UPC - E disable

EAN - 8 enable (*)

EAN - 8 disable

EAN - 13 enable (*)

EAN - 13 disable

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.

Disable (*)

Enable

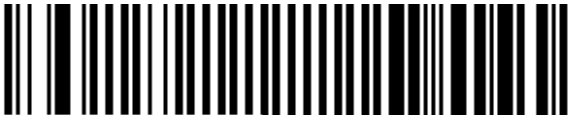
Symbology identifier

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

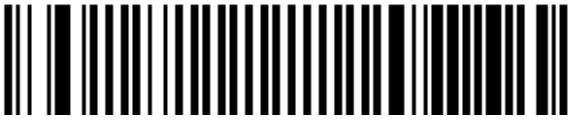
A0 (*)



Compose: Please refer to SCM (Software Configuration Manager) in CD

UPC-E

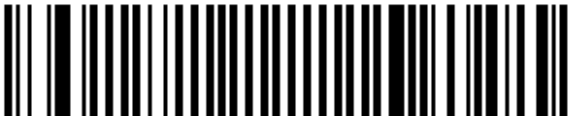
E0 (*)



Compose: Please refer to SCM (Software Configuration Manager) in CD

EAN-8

FF (*)



Compose: Please refer to SCM (Software Configuration Manager) in CD

EAN-13

F (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

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).

UPC-A

A (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

UPC-E

E (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

EAN-8

N (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

EAN-13

F (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

Add - on digits

not required but transmitted if read (*)

required and transmitted

add-on 2

Disable (*)

Enable

add-on 5

Disable (*)

Enable

security level

10 (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

Check digit transmission

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

UPC-A

Enable (*)

Disable

UPC-E

Enable (*)

Disable

EAN-8

Enable (*)

Disable

EAN-13

Enable (*)

Disable

UPC number system

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

UPC-A

Enable (*)

Disable

UPC-E

Enable (*)

Disable

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.

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

UPC-A, UPC-E, EAN-8 - UPC-A transmitted as UPC-A

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

UPC-A, UPC-E, EAN-8 - UPC-E transmitted as UPC-A

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

UPC-A, UPC-E, EAN-8 - EAN-8 transmitted as EAN-13

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.

Disable (*)

Enable

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"

Disable (*)

Enable

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.

Disable (*)

Enable

Reading range

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

Normal

Extended (*)

GS1 DataBar (RSS)

- Also known as Reduced Space Symbology (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

Enable

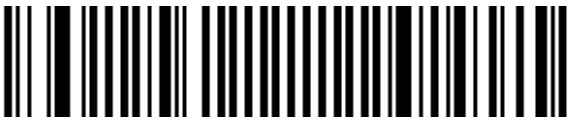
Disable (*)

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).

C3 (*)



Compose: Please refer to SCM (Software Configuration Manager) in CD

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).

* (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

Limited

- Numerical symbology.
- Does not read stacked version.

Enable

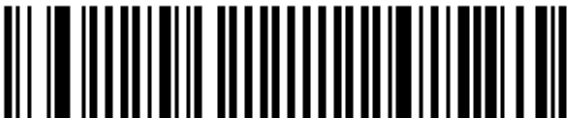
Disable (*)

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).

C4 (*)



Compose: Please refer to SCM (Software Configuration Manager) in CD

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).

* (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

Expanded

- Alphanumerical symbology.
- Reads the following types of GS1 DataBar Expanded:

  GS1 DataBar Expanded

  GS1 DataBar Expanded Stacked

Enable

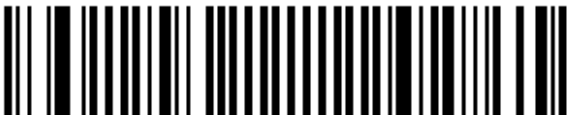
Disable (*)

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).

C5 (*)



Compose: Please refer to SCM (Software Configuration Manager) in CD

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).

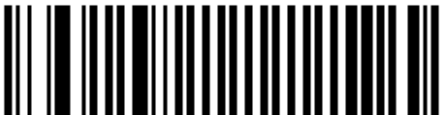
* (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

Interleaved 2 of 5

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

Disable (*)



Enable

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).

B2 (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

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).

I (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

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

Disable (*)

Modulo 10

Check digit transmission

Disable (*)

Enable

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

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).

L1 as Minimal length (*)

L1, L2, L3 as fixed length

L1 as min, L2 as max

Set length L1, L2 and L3

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

Compose L1:

Compose L2:

Compose L3:

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).

High (*)

Medium

Low

Matrix 2 of 5

- Numerical symbology.

Disable (*)

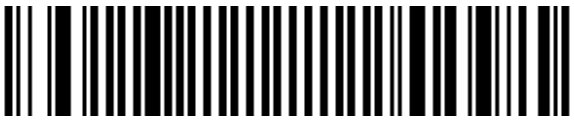
Enable

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).

B4 (*)



Compose: Please refer to SCM (Software Configuration Manager) in CD

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).

D (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

Matrix stop/start char

Regular (*)

- Start/stop characters and checksum not transmitted.

Regular (*)

ChinaPost

- Specific start/stop characters (not transmitted) and checksum (transmitted).

ChinaPost

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 = 3 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).

L1 as Minimal length (*)

L1, L2, L3 as fixed length

L1 as min, L2 as max

Set length L1, L2 and L3

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

Compose L1:

Compose L2:

Compose L3:

MaxCode

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

Disable (*)

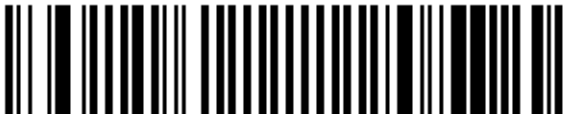
Enable

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).

D2 (*)



Compose: Please refer to SCM (Software Configuration Manager) in CD

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).

* (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

Mode 0

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

Disable (*)

Enable

Header

regular (AIM) (*)

Extended

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).

Disable (*)

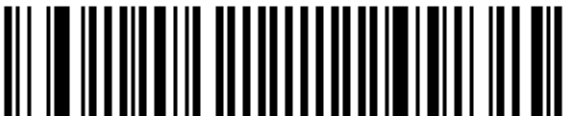
Enable

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).

C8 (*)



Compose: Please refer to SCM (Software Configuration Manager) in CD

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).

* (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

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)

Disable (*)

Enable

MSI Code

- Numerical symbology.

Disable (*)

Enable

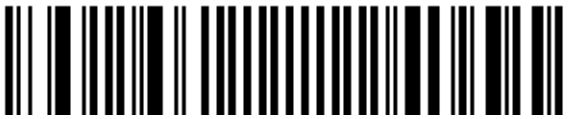
Symbology identifier

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).

B8 (*)



Compose: Please refer to SCM (Software Configuration Manager) in CD

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).

D (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

Check digit

Check digit verification

Modulo 10 (*)

Double Modulo 10

Check digit transmission

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

Enable (*)

Disable

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 = 2 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).

L1 as Minimal length (*)

L1, L2, L3 as fixed length

L1 as min, L2 as max

Set length L1, L2 and L3

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

Compose L1:

Compose L2:

Compose L3:

PDF 417

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

Enable (*)

Disable

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).

C7 (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

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).

* (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

Structured append

Disable (*)

Enable

Header transmission

Disable (*)

Enable

Plessey Code

- Numerical symbology.

Disable (*)

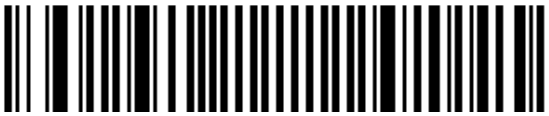
Enable

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).

C2 (*)



Compose: Please refer to SCM (Software Configuration Manager) in CD

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).

D (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

Check digit transmission

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

Disable (*)

Enable

Unconventional stop

Disable (*)

Enable

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).

L1 as Minimal length (*)

L1, L2, L3 as fixed length

L1 as min, L2 as max

Set length L1, L2 and L3

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

Compose L1:

Compose L2:

Compose L3:

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.

Disable (*)

Enable

Model 1 control

- Enables the decoding of Model 1 QR codes.

Disable (*)

Enable

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

Normal (*)

Inverse

Automatic

MicroQR activation

- Micro QR is a small QR code with only one pattern.

Disable (*)

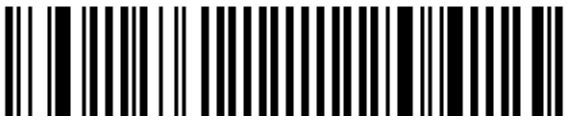
Enable

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).

D1 (*)



Compose: Please refer to SCM (Software Configuration Manager) in CD

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).

* (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

Structured append

Disable (*)

Enable

Header transmission

Disable (*)

Enable

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."

Disable (*)

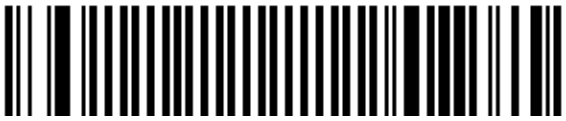
Enable

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).

B5 (*)



Compose: Please refer to SCM (Software Configuration Manager) in CD

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).

D (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

Format

Identicon (*)

Computer Identics

Check digit

Check digit verification

Disable (*)

Modulo 10

Check digit transmission

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

Disable (*)

Enable

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

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).

L1 as Minimal length (*)

L1, L2, L3 as fixed length

L1 as min, L2 as max

Set length L1, L2 and L3

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

Compose L1:

Compose L2:

Compose L3:

Telepen

- Alphanumeric full ASCII symbology - letter case defined.
- Default format = ASCII.

Disable (*)

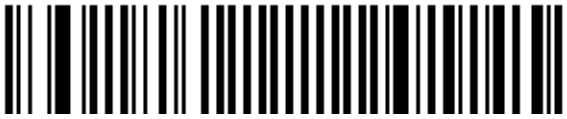
Enable

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).

C6 (*)



Compose: Please refer to SCM (Software Configuration Manager) in CD

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).

* (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

Format

ASCII (*)

Numeric

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 characters.s.

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).

L1 as Minimal length (*)

L1, L2, L3 as fixed length

L1 as min, L2 as max

Set length L1, L2 and L3

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

Compose L1:

Compose L2:

Compose L3:

Chapter 4

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.

Toggle

- 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.

Toggle

Level

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

Level

Aim

- 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.

Aim

Scanning / Triggering

Triggering modes

Continuous

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

Continuous

Level (*)

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

Level (*)

Pulse

- 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.

Pulse

Flashing

- 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.

Flashing

Autostand

- 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.

Autostand

Toggle

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

Toggle

Presentation

- 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.

Presentation

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.

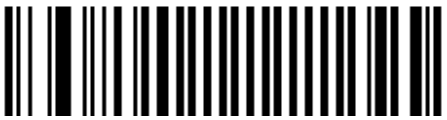
50 (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

Trigger timeout (sec)

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

2 (*)



Compose: Please refer to SCM (Software Configuration Manager) in CD

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.

Disabled

- 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).

Disabled

Hardware trigger enabled

Emulated trigger enabled

Hardware and emulated trigger

Software Trigger

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

Disable (*)

Enabled

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

Enable

start character [STX] (*)

Compose start character

- Use different characters for "start read" and "stop read."
- This option is NOT compatible with ISCP.

Compose start character

stop character [ETX] (*)

Compose stop character

- Use different characters for "start read" and "stop read."
- This option is NOT compatible with ISCP.

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 conti

Enable (*)

Disable

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.

0 (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

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.

Typical aimer (*)

One pull aim and read

- Pull and hold trigger - aiming beam (programmable duration) then reading beam.

One pull aim and read

One pull aim, second pull read

- First pull aiming beam, second pull reading beam.

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.

One pull aim, second pull read

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.

500 (*)

1200

Compose (ms)

Bad read message

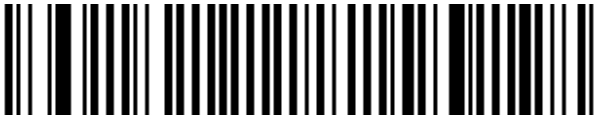
Activation

Disable (*)

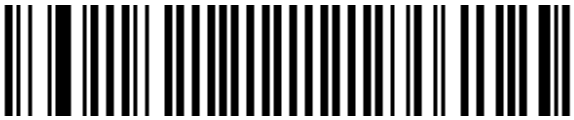
Enable

Compose

NOREAD (*)



Compose:



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).

Disable (*)

Enable

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.

Disable (*)

Enable

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!!!

Normal (*)

Medium

High

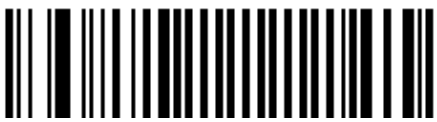
Consecutive same read data validation

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

Auto read count before transmission

Single read before transmission

Compose number of same reads:



Timeout between identical consecutive codes (ms)

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

Compose (ms):

Timeout between different consecutive codes (ms)

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

0 (*)

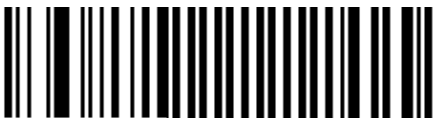
Compose (ms):

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

Disable (*)

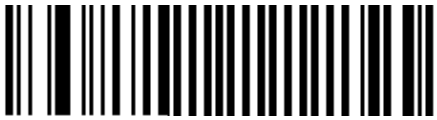


Enable

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).

No tolerance (*)



Compose (%):

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.

1 (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

Beeps / LEDs

Note (tone frequency)

High (*)

Medium

Low

Power-up beeps

2 beeps = successful power-up

3 long beeps = EEPROM integrity error (contact your Intermec representative !).

Disable (*)

Enable

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 !).

1 beep (*)

2 beeps

None

Duration

60

80 (*)

200

300

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.

During transmission (*)

Before transmission

After transmission

Good read LED duration

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

80 (*)

500

1000

2500

5000

Disable/enable all good read signals

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

Disable

Enable (*)

Error beep

Disable

Enable (*)

Setup beep and LED

Disable

Enable (*)

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.

None (*)

Good Read Beep

Shorter Beep

Chapter 5

Data Transmission Settings

- Modify data transmission settings to optimize performance.

ISCP

- MS920 Scanner Control Protocol parameters.

ISCP (*)

None

Data format

Raw format

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

Raw format

Packet format

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

Packet format

Extended barcode data format

BCD

- "Packet" data format must be activated to enable BCD transmission.

- Precedes barcode data with "[BCD]" indicator.

BCD

BCDEX (*)

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

BCDEX (*)

DPS

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.

2048 (*)

Compose: Please refer to SCM (Software Configuration Manager) in CD

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 barcode

- 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.

Disable

Enable (*)

Preprocessing ISCP barcode

- 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.

Disable (*)

Enable

Unsuccessful decoding

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

Disable (*)

Enable

Start of read session

Disable(*)

Enable

End of read session

Disable(*)

Enable

Start-up

Disable(*)

Enable

Trigger pulled

Disable(*)

Enable

Trigger released

Disable(*)

Enable

Wake-up

Disable(*)

Enable

Structured append

Disable(*)

Enable

Symbology identifier

[symbology id] [data]

Not transmitted(*)

AIM format

[AIM symbology id] [data]

- Activates for all symbologies the 3-character symbology identifier standardized by the AIM Committee.
- Example: "] A 0" identifies standard Code 39 without check digit[[[If the data in a bar code is modified (ISBN, . . .), the standard AIM identifier for the symbology will be replaced by "]X0"]]].

NOTE: Depending on how the bar

AIM format

User Defined Identifier

[UDSI symbology id] [data]

- Activates user defined symbology identifier (UDSI) transmission for all symbologies.
- NOTE: To change the default values go to "Symbology/select symbology/ symbology identifier/UDSI" and use the compose option.

User Defined Identifier

Code Mark

[preamble] [code mark symbology id] [data] [postamble]

- Activates code mark symbology identifier transmission for all symbologies.

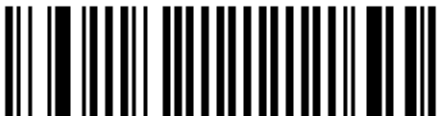
NOTE: To change the default values go to "Symbology/select symbology/ symbology identifier/code mark" and use the compose option.

Code Mark

Preamble

[preamble] [symbology id] [data] [postamble]

None(*)

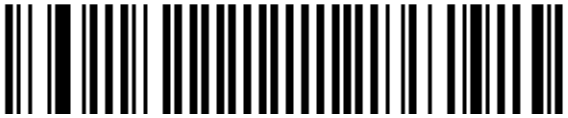


Compose: Please refer to SCM (Software Configuration Manager) in CD

Postamble

[preamble] [symbology id] [data] [postamble]

Carriage Return + Line Feed (*)



None

Compose: Please refer to SCM (Software Configuration Manager) in CD

Inter-Character / message delay

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

Inter-Character delay

- Do not use for IBM 46xx cash registers or laser/wand emulation!!!
- Value is in milliseconds.
- This is not used when ISCP is active

0 (*)

10

20

30

40

50

Inter-message delay

- Value is in milliseconds.

0 (*)

10

30

50

80

100

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 the scenario

- Activate the scenario(s) you want the product to detect.
- The combination of input type (symbology, ...), input length and input mask defines which data you want to intercept for editing.

Scenario 1

Disable (*)

Enable

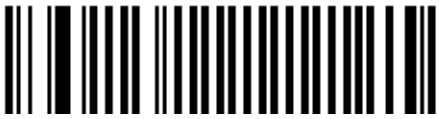
Select barcode Type:

Compose barcode length:

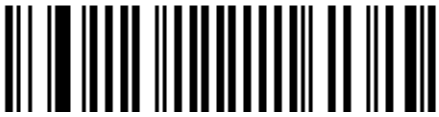
Compose mask:

Scenario 2

Disable (*)



Enable



Select barcode Type:

Compose barcode length:

Compose mask:

Scenario 3

Disable (*)

Enable

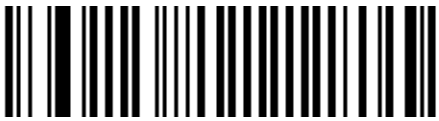
Select barcode Type:

Compose barcode length:

Compose mask:

Scenario 4

Disable (*)

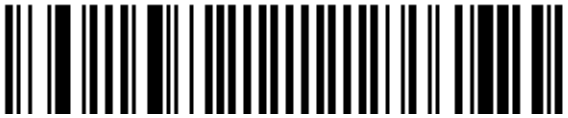


Enable

Select barcode Type:

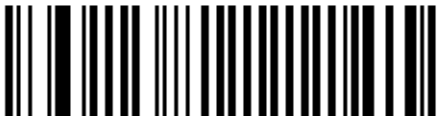
Compose barcode length:

Compose mask:

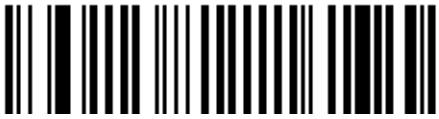


Scenario 5

Disable (*)



Enable



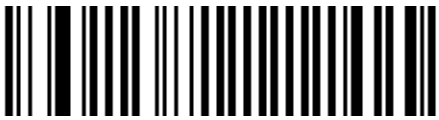
Select barcode Type:

Compose barcode length:

Compose mask:

Scenario 6

Disable (*)



Enable

Select barcode Type:

Compose barcode length:

Compose mask:

Scenario 7

Disable (*)

Enable

Select barcode Type:

Compose barcode length:

Compose mask:

Chapter 6

Configuration Modes and Utilities

Get firmware version

- Get version info.

Get firmware version

Get decode version

- Get decode version info.

Get decode version

Get asub-system versions

- Get all component versions.

Get asub-system versions

Optical setup (using configuration bar codes)

- Use configuration bar codes to set up the product.

Always enabled

- Configuration with bar codes possible all the time.

Always enabled

Inhibit after 1 mn

- 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).

Inhibit after 1 mn

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).

Disable (*)

Enable

Appendix I

Worldwide Support

Unitech's professional support team is available to quickly answer questions or technical-related issues. Should an equipment problem occur, please contact the nearest Unitech regional service representative. For complete contact information please visit the Web sites listed below:

Region	Web Site
Global Operation Center	http://www.ute.com
Unitech Taiwan	http://tw.ute.com
Unitech Asia Pacific & Middle East	http://apac.ute.com http://india.ute.com
Greater China Division	http://cn.ute.com
Unitech Japan	http://jp.ute.com
Unitech North America	http://us.ute.com ; http://can.ute.com
Unitech Latin America	http://latin.ute.com
Unitech Europe	http://eu.ute.com