

# User Manual

## DT322-O



### Barcodescanner – DT322-O



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## Introduction

Thank you for trusting a product from DTRONIC. Please read the contents of the user manual carefully in order to use the products safely and effectively.

You are advised to keep this manual correctly for your installation and as a reference. Please do not disassemble the product or tear off the seal, otherwise we will not provide warranty or replacement service.

The illustrations in this user manual are for reference only. If there are images that do not match the actual product, please take the actual product as standard.

Updated information is subject to change without notice. All information in this manual is copyrighted and our company reserves all rights. It is prohibited to distribute, copy, compile or sell all or part of this manual without our written permission.

DTRONIC is a BOIP registered trademark and legally protected in cooperation with GS1. Diwolar is the only company with the rights to market this trademark. If you have purchased a product that was not purchased through Diwolar, the warranty is void. When contacting customer service always ask for the order number. This user manual applies to DTRONIC barcode scanners that identify barcodes using a laser scan pattern.

DTRONIC is not liable for damages and defects suffered when the barcode scanner fails, does not work properly or is misused.

Do you have any questions about your product? We will be happy to assist you.

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### Kind regards, team Dtronic

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# 1. Product

## 1.1 Function

- Works with Plug&Play and without installation software.
- Works with most WMS systems.
- Some WMS or POS systems must be set up to use a scanner.
- Device the scanner is connected to will see it as keyboard.
- Basically the scanner scans the 95% of bar codes, remaining 5% can be set as desired with this manual.
- There are patented parts in the scanner, DTRONIC has the rights to sell these items on the Dutch, Belgian and German market

## 1.2 Unbox

After opening the box containing the product, perform the following steps:

- Remove the scanner accessories from the packaging.
- Remove the scanner from the packaging.
- At the packing list, check that everything is complete and in good condition. If there are damaged or missing parts, save the original packaging and contact DTRONIC for customer service.

Packing list:

1. Handheld scanner
2. USB Connection Cable (for wireless scanners, this is the charging cable).
3. Paperclip
4. Abridged user manual

## 1.3 Start

Startup: connect the computer to the scanner. The computer will recognize it as a keyboard and the scanner can be used.

Power off: remove the cable connected to the scanner; remove the USB connected to the computer.

Restart: if the scanner crashes or is unresponsive, turn it off and restart it. Optionally, use the factory setting from this manual

## 1.4 Window

The scanning window must be kept clean, the supplier does not bear the warranty responsibility due to improper maintenance. Prevent the window from wearing out or being scratched by a hard object. Use a soft cloth to remove stain on the scanning window. Clean the scan window with a soft cloth, such as a lens cleaning cloth

Spraying liquid on the scan window is prohibited. Prohibit all cleaning solvents except cleaning water.






## 1.5 Reading

If the bar code is small, it should be closer to the scan window; if the bar code is large, it should be further away from the scan window for easier reading.

If the bar code is highly reflective (for example, the coated surface), you may need to tilt the bar code at an angle to scan the bar code. The best distance to read a bar code is 10-15 cm

## 1.6 Picture

## 1.7 Led indicator

|  | INDICATOR STATUS  | EXPLAIN                              |
|--|-------------------|--------------------------------------|
|   | Red light on      | Charging                             |
|   | Red light off     | No charging                          |
|   | Green light on    | No decoding                          |
|   | Green light off   | Decode succesfully                   |
|  | One blue light on | Pairing successful or connect to USB |



## 2. System Setup

### 2.1 System Setup

Option and function setting mainly by reading a series of special bar codes. In this chapter, we give you a detailed introduction to the options and functions available for user setup and the corresponding setup code.

This method of setting up the scan is direct, easy to understand and user-friendly.

#### 2.1.1 Setup code

|   |  |
|---|--|
|  |  |
| Startup settings (default)  | Exit Settings  |


#### 2.1.2 Restore factory default settings

|   |
|---|
|  |
| Restore factory settings  |



#### 2.1.3 Led

|   |  |
|---|--|
|  |  |
| Enable Illumination   | Disable Illumination   |
|  |  |
| Always off  | Always on  |



### 2.1.4 Beeper Duration

|  |  |
|--|--|
|  |  |
|  | Mute   |



### 2.1.5 Beeper settings

|   |  |
|---|--|
|    |  |
| Volume set to High (50%) (default)  | Volume set to midrange (25%)   |
|  |  |
| Volume set to bass (12.5%)  |  |

### 2.1.6 Set the beep switch



|   |  |
|---|--|
|  |  |
| Open (default)  | Close  |

### 2.1.7 Power on beep switch

|   |  |
|---|--|
|  |  |
| Open (default)  | Close  |



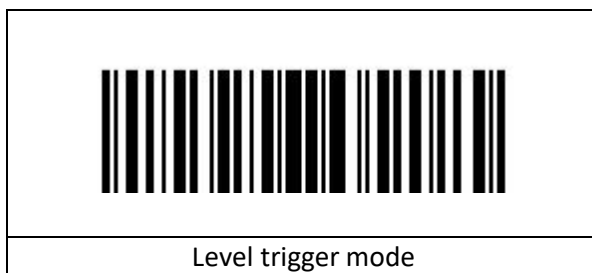
### 2.1.8 Read success beep switch

|   |  |
|---|--|
|  |  |
| Open (default)  | Close  |

## 2.2 Reading mode settings

### 2.2.1 Level trigger mode

Enter the reading state when the trigger key pin is at low level. Press and hold the trigger key to start reading code. After reading the code successfully or releasing the trigger key, the code reading ends and the next decoding needs to re-enter the low level state.






### 2.2.2 Continuous mode (default)

When the reading setting code is switched to this mode, it enters the continuous reading state. In this mode, the "repeat read switch" can be used to prevent the same barcode from being read more than once.



### 2.2.3 Pulse trigger mode

When the reading setting code is switched to this mode, it enters the pulse-triggered reading state.

|   |  |
|---|--|
|  |  |
| Pulse trigger mode  | High sensitivity   |
|  |  |
| Low sensitivity   |  |

### 2.2.4 Auto Scan mode

|  |
|--|
|  |
| Auto scan  |

### 2.2.5 Code reading timeout

|   |  |
|---|--|
|  |  |
| 30sec   | 300sec   |
|  |  |
| 2400sec   |  |

## 2.2.6 One read timeout

One time reading timeout time, the unit is 0.1 seconds. The default value is 30 (3 seconds), when set to 0, it means that the device is always in the reading state, and the time range can be set: 0~999.

|   |  |
|---|--|
|  |  |
| Short time (3s)   | In time (7s)   |
|  |  |
| Long time (10s)   |  |

Valid only in "Level Trigger Mode" and "Pulse Trigger Mode".






## 2.3 Communication settings








### 2.3.1 Communication settings

|   |  |
|---|--|
|  |  |
| USB HID (default)   | USB CDC  |
|  |  |
| RS-232 serial port  | Mac  |

### 2.3.2 USB keyboard

Portuguese (Brazil) cannot output "?" and "/" .

|   |  |
|---|--|
|   |  |
| Nederlands  | Italian  |
|  |  |
| Spanish (Brazil)  | Portuguese   |
|  |  |
| Portuguese (Brazil)   | French   |

|  |   |
|--|---|
|   |   |
| German (Austria)   | Turkish Q   |
|   |   |
| Turkish F  | English (UK)  |
|   |   |
| Japanese   | German (Switzerland)  |
|  |  |
| French (Belgium)   | America   |

### 2.3.3 USB keyboard sending speed

If there is missed data at the receiver side, the occurrence speed should be turned down, which is easy to occur at the receiver side with poor performance.

|   |  |
|---|--|
|  |  |
| 5 ms (default)  | 10 ms  |
|  |  |
| 20 ms   |  |

### 2.3.4 Set USB keyboard sending speed

USB keyboard send speed, unit is milliseconds (ms). The default value is 5ms, the settable time range: 0ms~200ms.






Setting the USB keyboard to send speed of 50ms can be set by reading the following barcodes in order.



1. Read "Startup Settings"
2. Read the "Set USB keyboard send speed" setting code
3. Read data code: "5" "0" (see data code table)
4. Read "Save" (see data code table)
5. Read "Exit Settings"

### 2.3.5 Control Characters

Specific reference to the control character table, only the data content of the barcode is converted.

|   |  |
|---|--|
|  |  |
| Off (default)   | Control + ASCII mode   |
|  |  |
| Alt + Keypad mode   |  |

### 2.3.6 Serial communication settings

|   |  |
|---|--|
|  |  |
| Data bit 7  | Data bit 8   |
|  |  |
| Stop bit 1  | Stop bit 2   |




### 2.3.7 Serial port baud rate setting

|   |  |
|---|--|
|  |  |
| Baud rate 4800  | Baud rate 9600 (default)   |
|  |  |
| Baud rate 19200   | Baud rate 38400  |
|  |  |
| Baud rate 57600   | Baud rate 115200   |

### 2.3.8 Serial port output

|   |  |
|---|--|
|  |  |
| UTF-8   | GBK  |
|  |  |
| Serial output according to barcode content  |  |

### 2.3.9 Serial port parity bit setting

|   |  |
|---|--|
|  |  |
| No checksum (default)   | Odd calibration  |
|  |  |
| Even Check  |  |

## 2.4 Data format setting

Length of custom prefix and suffix: (0~10) characters, if set to "on", "Code ID prefix", "custom prefix", "end suffix", etc. will be added before and after the decoding information. "Custom suffix", "End suffix", etc.



The maximum number of data cache is 5, and the maximum length of individual data is 7900 characters; the data output is sequential output, and you need to wait for the first barcode output to finish before the second barcode output, and so on.



### 2.4.1 Custom prefix on/off settings

Custom prefixes add a user-defined string before the decoded information. For example, if you allow to add a custom prefix and set the prefix to the string "AB", after reading the barcode with the data "123", the scanner adds the string "AB" before the string "123", and the host side receives "AB123". After the barcode reading data is "123", the scanner will add the string "AB" before the string "123", and the host side will receive "AB123".

If set to "Off", the decoded information will only have the barcode data information, no prefix, and the default value is to turn off the custom prefix output.

|   |  |
|---|--|
|  |  |
| Enable  | Disable (default)  |

### 2.4.2 Customized prefixes

The custom prefix adds a user-defined string before the decoded information, and the output format after customization is "Custom Content + Barcode Content".

Set the custom prefix to 'a' (the hex value of a is 0x61)



1. Read "Startup Settings"
2. Read the "Custom Prefix" setting code
3. Check the ASCII code of the character "a": the ASCII code of "a" is "0x61" (see ASCII code table)
4. Read data code: "6" "1" (see data code table)
5. Read "Save" (see data code table)
6. Read "Exit Settings"

|   |
|---|
|  |
| Customized prefixes   |

### 2.4.3 Custom suffix on/off settings

The custom suffix adds a user-defined string after the decoded information. For example, it is allowed to add a custom suffix and set the suffix to the string "AB", after reading the barcode with the data of "123", the scanner adds the string "AB" after the string "123", and the host side receives "123AB". After the barcode reading data is "123", the scanner will add the string "AB" after the string "123", and the host side will receive "123AB".

If set to "Off", only the barcode data information will be in the decoded information, no suffix, and the default value is to turn off the custom suffix output.

|   |  |
|---|--|
|  |  |
| Enable  | Disable (default)  |

### 2.4.4 Custom suffixes

Custom suffix adds a user-defined string after the decoded information, and the output format after customization is "barcode content + custom content".

Set the custom suffix to 'a' (the hex value of a is 0x61)

1. Read "Startup Settings"
2. Read the "Custom Suffix" setting code
3. Check the ASCII code of the character "a": the ASCII code of "a" is "0x61" (see ASCII code table)
4. Read data code: "6" "1" (see data code table)
5. Read "Save" (see data code table)
6. Read "Exit Settings"

|   |
|---|
|  |
| Custom suffixes   |

### 2.4.5 Custom ID output method

The user can use Code ID to identify the barcode type and the Code ID corresponding to each barcode type is customizable. The Code ID for all barcodes is 1 character.



Close Code ID (default): Code ID is not spliced to the read string.

Code ID prefix: The Code ID is spliced before the recognition string.

Code ID suffix: The Code ID is spliced after the recognition string.

Restore the Code ID of all barcodes, including Codabar, to the default value of.

1. Read "Startup Settings"
2. Read "Clear all custom Code IDs".
3. Read "Exit Settings"





|   |  |
|---|--|
|  |  |
| Disable CODE ID (default)   | Code ID prefix   |

|   |                           |
|---|---------------------------|
|  |                           |
| Code ID suffix  | Clear all custom Code IDs |

### 2.4.6 Terminator settings

The terminator suffix is used to mark the end of a complete piece of data information. The terminator suffix stands alone and does not participate in any other form of data formatting. The terminator suffix must be the last piece of data sent, and no additional data will be added thereafter.

The ending character can be set to carriage return, line feed, carriage return line feed, tab or ETX, and the default ending character is set to carriage return.

|   |  |
|---|--|
|    |    |
| No terminator   | Enter (default)  |
|  |  |
| Tab   | Carriage return + Line feed (Enter+Down)   |

## 2.4.7 CTRL + X





| Non- printable<br>ASCII control characters |     |      | Keyboard Control + ASCII ( CTRL+ X) Mode |                                     |                      |
|--|-----|------|--|-------------------------------------|----------------------|
| DEC  | HEX | Char | Control + X Mode Off                     | Windows Mode Control + X<br>Mode On |                      |
|  |     |      |  | CTRL + X                            | CTRL + X<br>function |
| 0  | 00  | NUL  |  | CTRL+ @                             |                      |
| 1  | 01  | SOH  | NP Enter                                 | CTRL+ A                             | Select all           |
| 2  | 02  | STX  | Caps Lock                                | CTRL+ B                             | Bold                 |
| 3  | 03  | ETX  | ALT Make                                 | CTRL+ C                             | Copy                 |

|    |    |     |             |         |                  |
|----|----|-----|-------------|---------|------------------|
| 4  | 04 | EOT | ALT Break   | CTRL+ D | Bookmark         |
| 5  | 05 | ENQ | CTRL Make   | CTRL+ E | Center           |
| 6  | 06 | ACK | CTRL Break  | CTRL+ F | Find             |
| 7  | 07 | BEL | Enter / Ret | CTRL+ G |                  |
| 8  | 08 | BS  |             | CTRL+ H | History          |
| 9  | 09 | HT  | Tab         | CTRL+ I | Italic           |
| 10 | 0A | LF  |             | CTRL+ J | Justify          |
| 11 | 0B | VT  | Tab         | CTRL+ K | hyperlink        |
| 12 | 0C | FF  | Delete      | CTRL+ L | list, left align |
| 13 | 0D | CR  | Enter / Ret | CTRL+ M |                  |
| 14 | 0E | SO  | Insert      | CTRL+ N | New              |
| 15 | 0F | SI  | ESC         | CTRL+ O | Open             |
| 16 | 10 | DLE | F11         | CTRL+ P | Print            |
| 17 | 11 | DC1 | Home        | CTRL+ Q | Quit             |
| 18 | 12 | DC2 | PrtScn      | CTRL+ R |                  |
| 19 | 13 | DC3 | Backspace   | CTRL+ S | Save             |


|     |    |     |          |         |       |
|-----|----|-----|----------|---------|-------|
| 20  | 14 | DC4 |          | CTRL+ T |       |
| 21  | 15 | NAK | F12      | CTRL+ U |       |
| 22  | 16 | SYN | F1       | CTRL+ V | Paste |
| 23  | 17 | ETB | F2       | CTRL+ W |       |
| 24  | 18 | CAN | F3       | CTRL+ X |       |
| 25  | 19 | EM  | F4       | CTRL+ Y |       |
| 26  | 1A | SUB | F5       | CTRL+ Z |       |
| 27  | 1B | ESC | F6       | CTRL+ [ |       |
| 28  | 1C | FS  | F7       | CTRL+ \ |       |
| 29  | 1D | GS  | F8       | CTRL+ ] |       |
| 30  | 1E | RS  | F9       | CTRL+ ^ |       |
| 31  | 1F | US  | F10      | CTRL+ - |       |
| 127 | 7F | ␣   | NP Enter |         |       |





### 2.4.8 Case output settings

Case conversion for characters in a string, prefix and suffix have no effect.

|   |  |
|---|--|
|  |  |
| Normal output (default)   | Convert Case   |
|  |  |
| Convert all to Uppercase  | Convert All to lowercase   |

### 2.4.9 Data output settings

 **OPMERKING:**  
The prefix and suffix are not processed, and the prefix and suffix are output normally.



|   |  |
|---|--|
|  |  |
| Raw data output (default)   | Front-end data output  |
|  |  |
| Intermediate data output  | Back-end data output   |

## 2.5 Symbologies



Each type of barcode has its own unique properties, and the setup codes in this chapter allow you to adjust the scanner to accommodate these property changes.

The fewer barcode types that are turned on, the faster the scanner will Scan. You can turn off the barcode types that will not be used to improve the performance of the scanner.



**2.5.1 1D all symbologies**

|   |  |
|---|--|
|  |  |
| Enable  | Disable  |





**2.5.2 2D all symbologies**



|   |  |
|---|--|
|  |  |
| Enable  | Disable  |

**2.5.3 All barcodes**

|   |  |
|---|--|
|  |  |
| Close all barcodes  | Turn on all barcodes   |

**2.5.4 EAN8 Settings**







|   |  |
|---|--|
|  |  |
| EAN8 on (default)   | EAN8 off   |
|  |  |
| Enable EAN8 transmission Check Character (default)                                  | Disable EAN8 transmit Check Character  |

|   |  |
|---|--|
|  |  |
| Convert EAN8 to EAN13   | Do not Convert EAN8 to EAN13 (default)   |

### 2.5.5 Code 11 Settings



|   |  |
|---|--|
|  |  |
| Enable  | Disable  |
|  |  |
| Transmit check bit  | Not transmit check bit   |

### 2.5.6 EAN 13 settings



|   |  |
|---|--|
|  |  |
| EAN13 on (default)  | EAN13 off  |
|  |  |
| Enable EAN13 transmission Check Character<br>(default)                              | Disable EAN13 transmission checks  |
|  |  |
| Transmit EAN13 System Character (default)   | Do not Transmit EAN13 System Character   |





### 2.5.7 ISSN Settings

|   |  |
|---|--|
|  |  |
| Convert EAN-13 to ISSN  | Do not Convert EAN-13 to ISSN (default)  |

### 2.5.8 HANXIN

|   |  |
|---|--|
|  |  |
| Enable  | Disable  |







### 2.5.9 ISBN setting

|   |  |
|---|--|
|  |  |
| Convert EAN13 to ISBN   | Do not Convert EAN13 to ISBN (default)   |



### 2.5.10 UPC-A settings

|   |  |
|---|--|
|  |  |
| Transmit UPC-A check character (default)  | Do not Transmit UPC-A check character  |
|  |  |
| Enable  | Disable  |



**2.5.11 UPC-E settings**

|  |   |
|--|---|
|   |   |
| UPC-E on (default)   | UPC-E Off   |
|   |   |
| Transmit UPC-E Check Character (default)   | Do no Transmit UPC-E transmission Check Character                                   |
|  |  |
| Convert UPC-E to UPC-A   | Do not Convert UPC-E to UPC-A (default)   |











**2.5.12 UPCE**

|   |  |
|---|--|
|  |  |
| Enable  | Disable  |


**2.5.13 EAN/UPC**

|   |  |
|---|--|
|  |  |
| Enable  | Disable  |

**2.5.14 Code 39 Settings**

|   |  |
|---|--|
|    |    |
| Code 39 on (default)  | Code 39 Off  |
|   |   |
| Enable Code 39 Check Character  | Disable Code 39 Check Character (default)  |
|  |  |
| Transmit Code 39 Check Character  | Do not Transmit Code 39 Check Character (default)                                    |
|  |  |
| Transmit Code 39 start and stop characters  | Do not Transmit Code 39 start and stop characters (default)                          |
|  |  |
| Full ASCII On   | Full ASCII Off (default)   |

### 2.5.15 Code 39 Length Setting

|   |  |
|---|--|
|  | <p><b>OPMERKING:</b><br/>If the maximum length is less than the minimum length, only the barcode of these two lengths will be Scan. If the maximum length is equal to the minimum length, only this length is supported.</p> |
|---|--|



|   |  |
|---|--|
|  |  |
| Minimum length setting  | Maximum length setting   |

**Example**





Set the scanner to Scan only barcodes with a minimum of 8 bytes and a maximum of 12 bytes.

1. Scan "Startup Settings"
2. Scan "Minimum length setting"
3. Scan Digital Code "8" (see Appendix 1 for data and edit barcode)
4. Scan "Save" (see Appendix 1 to save or cancel)
5. Scan "Maximum length setting"
6. Scan Digital Code "1" "2" (see Appendix 1)
7. Scan "Save" (see Appendix 1 to save or cancel)
8. Scan "Exit Settings"

### 2.5.16 Code 32 settings


|   |  |
|---|--|
|  |  |
| Convert Code39 to Code32  | Do not Convert Code39 to Code32 (default)  |


### 2.5.17 Code 128 settings

|   |  |
|---|--|
|  |  |
| Code 128 on (default)   | Code 128 Off   |
|  |  |
| Transmit Code 128 Check Character   | Do not Transmit Code 128 Check Character (default)                                 |

### 2.5.18 Code 128 length setting

**OPMERKING:**

 If the maximum length is less than the minimum length, only the barcode of these two lengths will be Scan. If the maximum length is equal to the minimum length, only this length is supported.



|   |  |
|---|--|
|  |  |
| Minimum length setting  | Maximum length setting   |

**Example**


Set the scanner to Scan only barcodes with a minimum of 8 bytes and a maximum of 12 bytes.

1. Scan "Startup Settings"
2. Scan "Minimum length setting"
3. Scan Digital Code "8" (see Appendix 1 for data and edit barcode)
4. Scan "Save" (see Appendix 1 to save or cancel)
5. Scan "Maximum length setting"
6. Scan Digital Code "1" "2" (see Appendix 1)
7. Scan "Save" (see Appendix 1 to save or cancel)
8. Scan "Exit Settings"

### 2.5.19 Code 93 settings

|   |  |
|---|--|
|  |  |
| Code 93 On (default)  | Code 93 Off  |

### 2.5.20 Code 93 Length Setting

|   |  |
|---|--|
|  | <b>OPMERKING:</b><br>If the maximum length is less than the minimum length, only the barcode of these two lengths will be Scan. If the maximum length is equal to the minimum length, only this length is supported. |
|---|--|







|   |  |
|---|--|
|  |  |
| Minimum length setting  | Maximum length setting   |

#### Example

Set the scanner to Scan only barcodes with a minimum of 8 bytes and a maximum of 12 bytes.


1. Scan "Startup Settings"
2. Scan "Minimum length setting"
3. Scan Digital Code "8" (see Appendix 1 for data and edit barcode)
4. Scan "Save" (see Appendix 1 to save or cancel)
5. Scan "Maximum length setting"
6. Scan Digital Code "1" "2" (see Appendix 1)
7. Scan "Save" (see Appendix 1 to save or cancel)
8. Scan "Exit Settings"

### 2.5.21 Codabar Settings

|   |  |
|---|--|
|  |  |
| Codabar on (default)  | Codabar Off  |
|  |  |
| Transmit Codabar start and stop characters  | Do not Transmit Codabar start and stop characters (default)                        |
|  |  |
| Not check   | Enable check transmit check bit  |

### 2.5.22 Codabar Length Setting

**OPMERKING:**

 If the maximum length is less than the minimum length, only the barcode of these two lengths will be Scan. If the maximum length is equal to the minimum length, only this length is supported.

|   |  |
|---|--|
|  |  |
| Minimum length setting  | Maximum length setting   |



**Example**

Set the scanner to Scan only barcodes with a minimum of 8 bytes and a maximum of 12 bytes.



1. Scan "Startup Settings" barcode
2. Scan "Minimum length setting" barcode
3. Scan Digital Code "8" (see Appendix 1 for data and edit barcode)
4. Scan "Save" (see Appendix 1 to save or cancel)
5. Scan "Maximum length setting"

6. Scan Digital Code "1" "2" (see Appendix 1)
7. Scan "Save" (see Appendix 1 to save or cancel)
8. Scan "Exit Settings".



### 2.5.23 GS1 Databar Limited

|   |  |
|---|--|
|  |  |
| Enable  | Disable  |



### 2.5.24 GS1 Databar omnidirectional

|  |   |
|--|---|
|  |  |
| Enable   | Disable   |

### 2.5.25 GS1 Databar Expanded

|   |  |
|---|--|
|  |  |
| Enable  | Disable  |

### 2.5.26 Composite



|   |  |
|---|--|
|  |  |
| Enable  | Disable  |



### 2.5.27 Data matrix Code

|   |  |
|---|--|
|  |  |
| Enable  | Disable  |
|  |  |
| Enable Inverse DM   | Disable Inverse DM   |



### 2.5.28 MSI

|   |  |
|---|--|
|  |  |
| Enable  | Disable  |



### 2.5.29 QR

|   |  |
|---|--|
|  |  |
| Enable  | Disable  |
|  |  |
| Enable inverse QR   | Disable inverse QR   |



**2.5.30 PDF417**

|   |  |
|---|--|
|  |  |
| Enable  | Disable  |



**2.5.31 Straight 2 of 5 Industrial**





|  |   |
|--|---|
|  |  |
| Enable   | Disable   |

**2.5.32 Maxicode**

|   |  |
|---|--|
|  |  |
| Enable  | Disable  |

**2.5.33 Interleave 2 of 5 (ITF5) setting**

|   |  |
|---|--|
|  |  |
| ITF5 on (default)   | ITF5 off   |

|   |  |
|---|--|
|  |  |
| Enable ITF25 check character (default)  | Disable ITF25 Check Character  |
|  |  |
| Transmit ITF25 Check Character  | Do not Transmit ITF25 Check Charcter (default)                                     |

### 2.5.34 Aztec code

|  |   |
|--|---|
|  |  |
| Enable   | Disable   |

### 2.5.35 ITF25 length setting

**OPMERKING:**

If the maximum length is less than the minimum length, only the barcode of these two lengths will be Scan. If the maximum length is equal to the minimum length, only this length is supported.



Minimum length setting



Maximum length setting

**Example**

Set the scanner to Scan only barcodes with a minimum of 8 bytes and a maximum of 12 bytes.

1. Scan "Startup Settings" barcode
2. Scan "Minimum length setting" barcode
3. Scan Digital Code "8" (see Appendix 1 for data and edit barcode)
4. Scan "Save" (see Appendix 1 to save or cancel)
5. Scan "Maximum length setting"
6. Scan Digital Code "1" "2" (see Appendix 1)
7. Scan "Save" (see Appendix 1 to save or cancel)
8. Scan "Exit Settings".

### 3. Appendix

#### 3.1.1 Digital Barcodes



### 3.1.2 Control Characters Table

| Scan Value | Hex | Char    | Keystroke      | Ctrl combo |
|------------|-----|---------|----------------|------------|
| 1000       | 00h | NUL     | Null           | CTRL 2     |
| 1001       | 01h | SOH     | Keypad Enter   | CTRL A     |
| 1002       | 02h | STX     | Caps lock      | CTRL B     |
| 1003       | 03h | ETX     | Right Arrow    | CTRL C     |
| 1004       | 04h | EOT     | Up Arrow       | CTRL D     |
| 1005       | 05h | ENQ     | Null           | CTRL E     |
| 1006       | 06h | ACK     | Null           | CTRL F     |
| 1007       | 07h | BEL     | Enter          | CTRL G     |
| 1008       | 08h | BS      | Left Arrow     | CTRL H     |
| 1009       | 09h | HT      | Horizontal Tab | CTRL I     |
| 1010       | 0Ah | LF      | Down Arrow     | CTRL J     |
| 1011       | 0Bh | VT      | Vertical Tab   | CTRL K     |
| 1012       | 0Ch | FF      | Delete         | CTRL L     |
| 1013       | 0Dh | CR      | Enter          | CTRL M     |
| 1014       | 0Eh | SO      | Insert         | CTRL N     |
| 1015       | 0Fh | SI      | Esc            | CTRL O     |
| 1016       | 10h | DLE     | F11            | CTRL P     |
| 1017       | 11h | DC1     | Home           | CTRL Q     |
| 1018       | 12h | DC2     | Print Screen   | CTRL R     |
| 1019       | 13h | DC3     | Backspace      | CTRL S     |
| 1020       | 14h | DC4     | tab+shift      | CTRL T     |
| 1021       | 15h | NAK     | F12            | CTRL U     |
| 1022       | 16h | SYN     | F1             | CTRL V     |
| 1023       | 17h | ETB     | F2             | CTRL W     |
| 1024       | 18h | CAN     | F3             | CTRL X     |
| 1025       | 19h | EM      | F4             | CTRL Y     |
| 1026       | 1Ah | SUB     | F5             | CTRL Z     |
| 1027       | 1Bh | ESC     | F6             | CTRL [     |
| 1028       | 1Ch | FS      | F7             | CTRL \     |
| 1029       | 1Dh | GS      | F8             | CTRL ]     |
| 1030       | 1Eh | RS      | F9             | CTRL 6     |
| 1031       | 1Fh | US      | F10            | CTRL -     |
| 1032       | 20h | (space) | Space          | Space      |

| Scan value | Hex | Keystroke | Scan value | Hex | Keystroke | Scan value | Hex | Keystroke |
|------------|-----|-----------|------------|-----|-----------|------------|-----|-----------|
| 1033       | 21h | !         | 1067       | 43h | C         | 1101       | 65h | e         |
| 1034       | 22h | '         | 1068       | 44h | D         | 1102       | 66h | f         |
| 1035       | 23h | #         | 1069       | 45h | E         | 1103       | 67h | g         |
| 1036       | 24h | \$        | 1070       | 46h | F         | 1104       | 68h | h         |
| 1037       | 25h | %         | 1071       | 47h | G         | 1105       | 69h | i         |
| 1038       | 26h | &         | 1072       | 48h | H         | 1106       | 6Ah | j         |
| 1039       | 27h | '         | 1073       | 49h | I         | 1107       | 6Bh | k         |
| 1040       | 28h | (         | 1074       | 4Ah | J         | 1108       | 6Ch | l         |
| 1041       | 29h | )         | 1075       | 4Bh | K         | 1109       | 6Dh | m         |
| 1042       | 2Ah | *         | 1076       | 4Ch | L         | 1110       | 6Eh | n         |
| 1043       | 2Bh | +         | 1077       | 4Dh | M         | 1111       | 6Fh | o         |
| 1044       | 2Ch | ,         | 1078       | 4Eh | N         | 1112       | 70h | p         |
| 1045       | 2Dh | -         | 1079       | 4Fh | O         | 1113       | 71h | q         |
| 1046       | 2Eh | .         | 1080       | 50h | P         | 1114       | 72h | r         |
| 1047       | 2Fh | /         | 1081       | 51h | Q         | 1115       | 73h | s         |
| 1048       | 30h | 0         | 1082       | 52h | R         | 1116       | 74h | t         |
| 1049       | 31h | 1         | 1083       | 53h | S         | 1117       | 75h | u         |
| 1050       | 32h | 2         | 1084       | 54h | T         | 1118       | 76h | v         |
| 1051       | 33h | 3         | 1085       | 55h | U         | 1119       | 77h | w         |
| 1052       | 34h | 4         | 1086       | 56h | V         | 1120       | 78h | x         |
| 1053       | 35h | 5         | 1087       | 57h | W         | 1121       | 79h | y         |
| 1054       | 36h | 6         | 1088       | 58h | X         | 1122       | 7Ah | z         |
| 1055       | 37h | 7         | 1089       | 59h | Y         | 1123       | 7Bh | {         |
| 1056       | 38h | 8         | 1090       | 5Ah | Z         | 1124       | 7Ch |           |
| 1057       | 39h | 9         | 1091       | 5Bh | [         | 1125       | 7Dh | }         |
| 1058       | 3Ah | :         | 1092       | 5Ch | \         | 1126       | 7Eh | ~         |
| 1059       | 3Bh | ;         | 1093       | 5Dh | ]         | 1127       | 7Fh | Undefined |
| 1060       | 3Ch | <         | 1094       | 5Eh | ^         |            |     |           |
| 1061       | 3Dh | =         | 1095       | 5Fh | _         |            |     |           |
| 1062       | 3Eh | >         | 1096       | 60h | `         |            |     |           |
| 1063       | 3Fh | ?         | 1097       | 61h | a         |            |     |           |
| 1064       | 40h | @         | 1098       | 62h | b         |            |     |           |
| 1065       | 41h | A         | 1099       | 63h | c         |            |     |           |
| 1066       | 42h | B         | 1100       | 64h | d         |            |     |           |

### 3.1.3 Code ID

| Barcode Type                            | Code ID | Barcode Type         | Code ID |
|---|---------|----------------------|---------|
| Code 128                                | D       | QR                   | q       |
| GS1-128(UCC/EAN-128)                    | K       | AZTEC(Aztec Code)    | a       |
| AIM 128                                 | D       | DM(DataMatrix)       | u       |
| ISBT-128                                | D       | MaxiCode             | x       |
| EAN-8                                   | A       | Han Xin Code         | c       |
| EAN-13                                  | A       | Code 32              | B       |
| SSN                                     | L       | Trioptic Code 39     | M       |
| ISBN/Bookland EAN                       | L       | Coupon Code          | N       |
| UPC-E                                   | A       | GS1 DataBar-14       | R       |
| UPC-A                                   | A       | GS1 DataBar Limited  | R       |
| Interleaved 2 of 5/ITF                  | F       | GS1 DataBar Expanded | R       |
| ITF-14                                  | F       | SETUP128             | S       |
| Deutsche Post 14                        | w       | Veri Code            | v       |
| Deutsche Post 12                        | l       | Code 11              | H       |
| NEC-25(COOP 2 of 5)                     | o       | Plessey              | J       |
| Matrix 2 of 5                           | V       | MSI-Plessey          | J       |
| Industrial 2 of 5/Discrete 2 of 5/IND25 | G       | GS1-DataBar ( RSS)   | R       |
| Standard 2 of 5 (IATA 25)               | G       | PDF417               | r       |
| Code 39                                 | B       | Codabar              | C       |
| Code 93                                 | E       |                      |         |



### 3.1.4 AIM ID

| Barcode Type           | AIM ID       | Description                               |
|------------------------|--------------|---|
| Code 128               | ]C0          | Normal Data                               |
| GS1-128(UCC/EAN-128)   | ]C1          | FNC1 at code word position 1              |
| AIM 128                | ]C2          | FNC1 at code word position 2              |
| ISBT-128               | ]C0          |   |
| EAN-8                  | ]E4          | General data                              |
|                        | ]E4...]E1... | EAN-8 data plus 2 additional bits of code |
|                        | ]E4...]E2... | EAN-8 data plus 5 additional bits         |
| EAN-13                 | ]E0          | General data                              |
|                        | ]E3          | EAN-13 data plus 2/5 additional bits      |
| ISSN                   | ]X0          | General Data                              |
| ISBN/Bookland EAN      | ]X0          | General Data                              |
| UPC-E                  | ]E0          | Common Data                               |
|                        | ]E3          | UPC-E data plus 2/5 bit append code       |
| UPC-A                  | ]E0          | Common Data                               |
|                        | ]E3          | UPC-A data plus 2/5 bit append code       |
| Interleaved 2 of 5/ITF | ]I0          | Common Data                               |
|                        | ]I1          | Checksum and output checksum character    |
|                        | ]I3          | Checksum but no checksum character output |
| ITF-14                 | ]I1          | Output check character                    |

|   |     |  |
|---|-----|--|
|   | ]I3 | No check character output  |
| Deutsche Post 14                            | ]X0 | Normal data  |
| Deutsche Post 12                            | ]X0 | Common data  |
| NEC-25(COOP 2 of 5)                         | ]X0 | Common data  |
| Matrix 2 of 5                               | ]X0 | Common data  |
| Industrial 2 of 5/<br>Discrete 2 of 5/IND25 | ]S0 | Common data  |
| Standard 2 of 5 (IATA 25)                   | ]R0 | General Data   |
| Code 39                                     | ]A0 | No checksum, no Full ASCII extensions, output data as is                   |
|   | ]A1 | MOD43 checksum and output checksum characters                              |
|   | ]A3 | MOD43 checksum, but no checksum characters                                 |
|   | ]A4 | Full ASCII extensions are applied, but no checksum                         |
|   | ]A5 | Full ASCII extension is performed and checksum characters are output       |
|   | ]A7 | Full ASCII extensions are performed, but no checksum characters are output |
| Code 93                                     | ]G0 | Common Data  |
| Codabar                                     | ]F0 | Normal data  |
|   | ]F2 | Checksum and output checksum characters                                    |
|   | ]F4 | Checksum, but does not output checksum characters                          |
| Code 11                                     | ]H3 | Common data  |
|   | ]H0 | MOD11 single character checksum and outputs check characters               |

|                   |     |  |
|-------------------|-----|--|
|                   | ]H3 | MOD11 single character parity, but no parity characters              |
| Plessey           | ]P0 | Common data  |
| MSI-Plessey       | ]M0 | Normal data  |
|                   | ]M0 | MOD10 checksum and outputs checksum characters                       |
|                   | ]M1 | MOD10 checksum, but no checksum characters                           |
| GS1-DataBar (RSS) | ]e0 | Standard data packets  |
| PDF417            | ]L0 | No option specified at this point, always transmits 3                |
| QR                | ]Q0 | QR code mode 1 (AIM ISS 97-001 compliant)                            |
|                   | ]Q1 | QR code mode 2 (2005 symbol), no ECI protocol is used                |
|                   | ]Q2 | QR code mode 2 (2005 symbol), ECI protocol is used                   |
|                   | ]Q3 | QR code pattern 2 (2005 symbol), no ECI protocol used, FNC1 in bit 1 |
|                   | ]Q4 | QR code mode 2 (2005 symbol), ECI protocol used, FNC1 in bit 1       |
|                   | ]Q5 | QR code mode 2 (2005 symbol), ECI protocol not used, FNC1 in bit 2   |
|                   | ]Q6 | QR code mode 2 (2005 symbol), ECI protocol used, FNC1 in bit 2       |
| AZTEC(Aztec Code) | ]z0 | No option is specified at this point, always transmit 3              |
| DM(DataMatrix)    | ]d0 | ECC 000 - 140  |
|                   | ]d1 | ECC 200  |
|                   | ]d2 | ECC 200, FNC1 in bit 1 or 5  |
|                   | ]d3 | ECC 200, FNC1 in bits 2 or 6   |

|              |     |  |
|--------------|-----|--|
|              | ]d4 | ECC 200 supports ECI protocol                          |
|              | ]d5 | ECC 200, FNC1 in bits 1 or 5 and supports ECI protocol |
|              | ]d6 | ECC 200, FNC1 in bit 2 or 6 and supports ECI protocol  |
| MaxiCode     | ]U1 | No option is specified at this time, always transmit 3 |
| Han Xin Code | X0  | No option is specified at this time, always transmit 3 |