2D BARCODE HAND SCANNER



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Manual

DA-81003 Rev.B

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1. Operating Setting

The factory default settings of DA-81003 can meet the needs of users for direct use in most cases. You can also set the parameters through the setting code according to actual needs.

1.1 Use of the setting code

Read the "Enable Setting Code" to configure the function of the reading module (setting code function). After the function is turned on, you can modify the parameters of the reader module by reading one or more setting codes. After reading the "Close Setting Code", the scanning module will exit the setting state.

 **Enable Setting Code	 Close Setting Code

Set the code content output enable and disable.

 Output setting code content	 **Do not output the content of the setting code

Note: The options marked with (**) in the setting code indicate the default functions or parameters.

1.2 Factory Default Reset

After reading these two setting code in order, the current parameter setting will be lost, and the factory default value will be restored. The factory default parameters and functions can be found in Appendix C.

 Restore Factory Default	 Wireless Restore Factory Settings

Note: Please use the "Restore Factory Default" function with caution.

2. Optional Function settings

Settings of the barcode scanner can be changed by scanning the setup barcodes included in this manual.

2.1 Upload Mode Setting

2.1.1 Instant Upload Mode

Read barcodes and upload it straight to the file you have opened.

To set the scanner to upload barcode instantly, scan the following code:

 Instant upload mode	

Scanning indication

(1) The buzzer emits a sound like "DI" when the barcode is uploaded successfully.

(2) The buzzer emits a sound like "DI-DI-DI" when the barcode cannot be uploaded.

Note: The transmission speed between every character can be changed by scanning the following code. If some characters are missing, please set the scanner to lower transmission speed. The higher the value, the slower the speed is.

Please make sure that the USB receiver is plugged.

 High speed	 Medium speed
 Low speed	 Slow speed

2.2 Storage Mode

Read barcodes and store the barcodes in scanner's own memory. You can upload the data to computer in batches when you need them. Internal storage saves up to 100,000 barcodes.

Note: In storage mode, the barcode will be stored in the scanner and will not come up on your computer instantly. The barcode comes up on your computer only when you scan the settings code "upload data".

To convert scanner from "instant upload mode" to "storage mode", scan the following barcode "Storage mode ".

 Storage mode	

Put the cursor in the blank and then scan code below to upload data.

 Upload data	

Put the cursor in the blank and then scan the code below to show total number of stored barcode.

 Show total storage	

Scan the barcode "Zero clearing" to clear all stored barcode. (For storage mode only)

 Zero clearing	

Scanning indication:

(1) The buzzer emits a sound like "DI" when the barcode is saved successfully in the built-in memory of the scanner.

(2) The buzzer blared for three seconds when the barcode cannot be saved in the built in memory of the scanner. The space of memory is not enough and cannot store any more barcodes. Please upload the saved barcode by scanning the code "Upload Data" and then clear the saved barcode by scanning code " zero clearing".

Note 1: In storage mode, the transmission speed between every barcode can be changed by scanning the following code. The higher the value, the slower the speed is.

Note 2: If the character upload speed (on page 5) is set to a slower speed, and the barcode upload speed is set to a higher speed. When uploading data in storage mode, the data maybe be lost. If some character or barcode are missing, please set the scanner to lower barcode transmission speed.

Please make sure that the USB receiver is plugged.

 High speed	 Medium speed
 Low speed	 Slow speed

3. Reading Mode

3.1 Manual Mode

Manual mode is the default reading mode. In manual mode, press the trigger button, and the reading module will start shooting and reading; within the limited time range of "single reading time", if the reading is successful, the reading module will output the reading content through the communication interface and stop reading, if you need to start a new reading, you need to trigger the button again. If the reading exceeds the single reading time, the shooting and reading will be suspended.

 **Manual Mode	

3.2 Trigger Mode

The trigger condition can be selected in manual mode. The default trigger condition is level trigger, or edge trigger can also be selected.

- Edge triggering means that the level pulse of the trigger signal is detected, that is, the reading starts, and the reading ends when the reading is successful, or the single reading time condition is reached.
- The level trigger condition means that the level of the trigger signal needs to be maintained from the beginning of the reading to the end of the reading. When the trigger level is cancelled, the reading is successful or the reading exceeds the single reading time, the reading ends.

 Edge triggering	 ** level trigger condition

3.2.1. Single reading time

The duration of a single reading refers to the longest time allowed to maintain the scanning and reading attempts after the reading is triggered and the reading is unsuccessful. When this time is exceeded, the reading state will be exited. The range of single reading time is 100ms～25500ms. Read the following setting codes to set the duration of a single reading.

 1000 ms	 3000 ms
 ** 5000 ms	 Infinite

3.3. Deep sleep mode

The deep sleep can be set by the following setting codes. Deep sleep is turned on. After a certain period of idle time, the module automatically enters deep sleep.

Deep sleep mode open	** Deep sleep mode close

After entering the deep sleep mode, you can wake up by pressing a button or a serial port command to exit the sleep mode.

Note: The deep sleep function is only effective for manual mode and TTL-232 serial port mode output.

3.3.1. Light sleep idle time

When deep sleep is not enabled, you can also set the idle time for light sleep by scanning the following setting codes.

Note: The light sleep function is only effective for manual mode and TTL-232 serial port mode output.

Light sleep idle time-0ms	**Light sleep idle time-0ms – 500ms
Light sleep idle time-0ms – 3000ms	Light sleep idle time-0ms – 5000ms

3.4 Command trigger mode

In command trigger mode, the reading module will start shooting and reading when it receives the trigger signal command sent by the host (that is, the bit 0 of the flag bit 0 x 0002 is written "1"); within the limited time range of "single reading time" If the reading is successful, the reading module will output the reading content through the communication interface and stop reading. If you need to start a new reading, you need to resend the trigger command. If the reading exceeds the single reading time, the reading will be suspended.

 Command trigger mode	

Note: In command trigger mode, the serial port command of the trigger signal is: 7E 00 08 01 00 02 01 AB CD; after the module receives the read command, the serial port returns the write success command: 02 00 00 01 00 33 31, read mode Turn on.

Read the following setting codes to enable and disable the trigger command response:

 Trigger command response prohibition	 **Trigger command response allowed

3.4.1. Single reading time

Please refer to section 3.2.1 for the setting of single reading time length setting code.

3.5 Continuous Mode

Continuous mode is a working mode in which the reading module continuously and cyclically shoots, reads and outputs information.

In this mode, the default reading interval will be 1000ms after successful reading.

In continuous mode, you can use the trigger level control to pause continuous reading or continue continuous reading. During continuous reading, you need to maintain the trigger level above 50ms and then cancel, and the reading will be suspended; in the paused reading state, also maintain the trigger level above 50ms and then cancel to continue reading.

Continuous mode	

3.5.1 Reading interval time

It refers to the interval time required for the next reading after the reading is successful. During this interval, no acquisition and reading are performed. Read the following setting codes to set the reading interval. The setting range is 0ms ～ 25500ms, and the default duration is 1000ms.

No interval	200 ms
500 ms	**1000 ms
3000 ms	5000 ms

3.5.2 Same code reading delay

In order to avoid the same bar code being read multiple times in continuous mode, you can request the read module to delay the set time in this mode before allowing the same bar code to be read. The same code reading delay refers to the refusal to read the same bar code within the set time after reading a bar code. Only after the duration has expired can it be read and output. By default, the same code reading delay is turned off.

 The same code reading delay open	 **The same code reading delay off

Read the following setting codes to set the same code reading delay time.
Setting range: 0ms～12700ms

Note: You need to turn on "Same code reading delay" before you can set the delay time.

 Infinite delay	 500ms
 1000 ms	 3000 ms
 5000 ms	

3.5.3 Single reading time

Please refer to section 3.2.1 for the setting of single reading time duration setting.

3.6 Induction mode

The induction mode refers to a working mode in which the reading module enters the reading by sensing the changes in the brightness of the surrounding environment. When the scene changes, the reading module starts to read. After the reading is successful and the output information or the single reading time expires, the reading module needs a certain interval (settable) to re-enter the monitoring state. If the following conditions do not occur, the reading module will work in cycles as described above: if the barcode is not scanned within a single reading time, the reading module will automatically suspend the reading and enter the monitoring state. In the induction reading mode, the reading module can also start to read the code after pressing the trigger button and continue to monitor the brightness of the surrounding environment when the code is successfully output, or the trigger button is released.

 Induction mode	

3.6.1. Single reading time

Please refer to section 3.2.1 for the setting of single reading time duration setting.

3.6.2. Reading interval time

Please refer to the setting code of reading interval time in section 3.5.1 to set the reading interval time.

3.6.3. Same code reading day

For the setting of code reading delay for the same code, please refer to section 3.5.2. to set the code reading delay for the same code.

3.7. Sensitivity

Sensitivity refers to the degree of change in the detection scene in the induction reading mode. When the reading module judges that the degree of scene change meets the requirements, it will switch from the monitoring state to the reading state.

Low sensitivity	**Normal sensitivity
High sensitivity	Very high sensitivity

3.8. Image stabilization time

Image stabilization time refers to the time required for the image stabilization of the reading module that detects the scene change in the induction reading mode before reading the code. The setting range of image stabilization time is 0~25500 ms, and the step length is 100ms. The default image stabilization time is 0ms.

**0 ms	
100 ms	** 400 ms
1000 ms	2000 ms

4. Illumination and Aiming

4.1. Illumination

There is a set of LEDs on the reading module specially equipped for shooting and reading, providing auxiliary supplementary light, illuminating the light beam on the reading target, improving the reading performance and the ability to adapt to weak ambient light. You can set according to actual conditions of use:

- Illumination on: light is on during shooting, and it is off at other times
- Illumination on constantly: light will continue on after the reading module is turned on
- Illumination off constantly: light will not light up under any circumstances.

 **Illumination on	
 Illumination on constantly	 Illumination off constantly

4.2 Aiming

There is an auxiliary aiming device on the reading module, which projects an indicator line when photographing and reading, prompting the user to read the centre of the scene image taken by the reading module.

- Aiming on when taking pictures:
  light is on during shooting, and it is off at other times.
- Aiming on constantly when taking pictures:
  light is always on during shooting, and it is off at other times.
- Aiming on constantly:
  The locating light will continue to glow after the reading module is turned on.
- Aiming off constantly:
  In any case, the aiming does not light up.

 **Aiming on	 Aiming on when taking pictures
 Aiming on constantly	 Aiming off constantly

5. Prompt output

5.1 Buzzer master switch

Read the following setting codes to turn on/off all prompts.

 Mute-on	 **Mute off

5.2 Buzzer settings

5.2.1. Passive buzzer

Read the following setting codes to set the buzzer as passive and set the driving frequency of the passive buzzer.

 **Passive buzzer	 Passive_low frequency

 **Passive_medium frequency	 Passive_high frequency

5.2.2. Active buzzer

Read the following setting codes to set the buzzer as active and set the working level of the active buzzer. Read "High Level", the buzzer is set to be active when the low level is idle, and the high level is effective when working; Read "Low", the buzzer is set to be active when the high level is idle, and low when working the level is valid.

 Active buzzer	
 **High level	 Low level

5.3 Set code reading prompt

Read the following configuration code, you can turn on/off the prompt tone of the configuration code:

 **Set Prompt Tone_Enable	 Set alert tone_off

5.4 Power-on prompt

When the reading module is successfully powered on, it can output or turn off the power-on prompt sound according to the setting requirements.

 **Boot Prompt-On	 Boot Prompt-Off

5.5 Reading success prompt LED/ prompt tone

After the reading module is successfully read, it will output BEEP and DLED prompt signals through the 12pin external interface by default, and prompt through the external passive buzzer and LED. According to user needs, these signals can be turned off.

 **Turn on the LED indicating successful reading	 Turn off the LED indicating successful reading
 **Turn on the prompt tone	 Turn off the prompt tone for sucessful reading

The user can set the BEEP duration of the prompt tone for successful reading by reading the following setting codes.

 30 ms	 **60 ms

90 ms	120 ms

5.6 Keyboard Language Setting

The scanner support 14 international keyboards:

You are suggested to set the keyboard type of the scanner to be in agreement with that in real use by scanning the correspondent barcode listed below.

National Keyboard Setting (direct scan code setting)		
English	Germany	France
Italian (Italy)	Portugal	Spain
Finland	Czech Republic	Japanese
Spanish (Mexico)	Portuguese (Brazil)	South Sami (Norway)
Turkish Q keyboard		

5.7 Image mirroring mode

When the image has a mirror flip, you can enter the mirror flip mode by reading the following setting codes.

Image mirror flip-on	**Image mirror flip-off

Note: In the mirror flip mode, only the barcode flipped by the mirror can be recognized. If you need to identify the normal barcode or the setting code, please exit the mirror flip mode first.

5.8 Reverse reading mode

In some special application scenarios, it is necessary to read special barcodes in black and white inverted. Users can enable/disable the reading function of inverted barcodes by reading the following setting codes.

**Reverse phase prohibition	Reverse phase allowed

5.9 Read device version information

Users can quickly obtain the current device version information by reading the following setting codes.

Read device version information	

5.10 Case Conversion Setting (Direct scan code setting)

 %%NO_CASE Case no conversion	 %%TG_CASE Case Reverse
 %%BG_CASE All Capital	 %%SM_CASE All lowercase

5.11 Power Off Settings

The scanner will be powered off if there is no operation on it over 5 minutes. Short press on the trigger can wake it up.

Scan one of the following barcodes to set the time interval, when it's idle exceeding the time interval you set, the scanner will be power off.

Setting method: scan "Set Sleep Time" first and then scan " XXs Automatic power off".

 Set Sleep Time	
 20s Automatic power off	 30s Automatic power off
 5 mins Automatic power off	 20 mins Automatic power off
 Never power off	

6. Data Edition

In actual applications, in order to facilitate data classification and processing, sometimes it is necessary to edit the read data before outputting.

- Data editing includes:
- Add prefix (Prefix)
- Add suffix (Suffix)
- Data segment interception of decoded data
- Output barcode Code ID
- Decoding failure characteristic output information (RF information)
- Add ending character (Tail)

The output data format after processing:
(Prefix) (Code ID) (Data) (Suffix) (Tail)

6.1 Prefix

The prefix is a string of character strings defined by the user before the decoded data. The user can add and modify the prefix by reading the following setting codes.

 Allow prefix	 **Prohibit adding prefix

Read the following setting codes. With the "Data Code" setting code and the "Save" setting code, the user can modify the prefix content.

 Modify prefix	

Note: The prefix allows up to 15 characters. For each prefix character, two hexadecimal values are used to represent it. Refer to Appendix F for the hexadecimal conversion table of character values.

6.2 Suffix

The suffix is a string of character strings defined by the user after the decoded data. The user can add and modify the suffix by reading the following setting codes.

Allow suffix	**Prohibit adding suffix

Read the following setting codes. With the "Data Code" setting code and the "Save" setting code, the user can modify the suffix content.

Modify suffix	

Note: The suffix allows up to 15 characters. For each suffix character, two hexadecimal values are used to represent it. Refer to Appendix F for the hexadecimal conversion table of character values.

6.3 Code ID

6.3.1 Add Code ID

Code ID uses one character. Users can add Code ID by reading the following setting codes to identify different barcode types.

Allow Code ID	**Prohibit adding Code ID

Note: Read the following setting codes to restore the default Code ID value of the barcode. Refer to Appendix E for the default list.

 Restore the default value of Code ID	

6.3.2 Modify Code ID

Users can modify the Code ID corresponding to each barcode by reading the following setting codes.

 Modify EAN 13 Code ID	 Modify EAN 18 Code ID
 Modify UPC-A Code ID	 Modify UPC-E0 Code ID
 Modify UPC-E1 Code ID	 Modify Code 128 Code ID
 Modify Code 39 Code ID	 Modify Code 93 Code ID

Modify Codabar Code ID	Modify Interleaved 2 of 5 Code ID
Modify industriel 25 Code ID	Modify Matrix 2 of 5 Code ID
Modify Code11 Code ID	Modify MS Code ID
Modify RSS Code ID	Modify limited RSS Code ID
Modify extended RSS Code ID	Modify QR Code ID
Modify Data Matrix Code ID	Modify PDF417 Code ID

6.4 End Character Setting

By default, the scanner is sending a 'carriage return' after scanning a code (the same as pressing the 'enter' key).

CR/ENTER (default)	CR+LF
Tab	Disable suffix

To add Carriage Return, please read code " Add Carriage Return”; to remove Carriage Return, please read code " disable suffix".

6.5 Data section

6.5.1 Data segment interception

This function is used in scenarios where the user needs to output part of the decoded information.

The decoding information Data consists of 3 parts:

(Start) (Center) (End)

The user can select part of the information to be output by reading the following setting codes.

**Transfer the entire data	Only transfer the Start segment

Only transfer the End segment	Only transfer the middle segment

6.5.2 Data segment length modification

The user can modify the length of the Start segment and the length of the End segment by reading the following setting codes, combined with the "data code" and "saving" setting codes. Both the Start segment and the End segment allow up to 255 characters, and both lengths are represented by one hexadecimal character. Refer to Appendix F for the hexadecimal conversion table of characters.

Modify the length of the Start segment	Modify the End segment length

6.6 RF Information

Read Fail (RF) information refers to the information output when the reading module fails to read, so that the user or the program can make corresponding adjustments or operations after detecting this information. Users can freely define RF information.

Read the following setting codes to enable/disable the sending of RF information.

Allow sending RF information	**Prohibit sending RF information

Read the following setting codes, combined with the "data code" and "save" setting codes, you can define and modify the RF information content by yourself. Each RF character is represented by two hexadecimal values, and a maximum of 15 characters are allowed. Refer to Appendix F for the character corresponding hexadecimal conversion table.

 Modify RF information	

Note: When inputting an odd number of hexadecimal values, the last digit setting fails and only the first few characters are output.

6.7 Output protocol

The user can modify the output format of the decoding result in the virtual serial port/serial port mode by reading the following setting codes.

The format of the decoded result with protocol output is: <03><length><decoded data>

 **Pure data output	 With protocol output

6.8 GS Character replacement

As the group separator, GS was used in the European Medicines Agency barcode after the 2012 London Olympics. Since GS characters are invisible in many text display tools, some areas need to replace GS with characters that can be displayed. In other words, replace the 0x1D byte in the ASCII code table with the displayable byte in ASCII.

Currently, the QR decoding module temporarily supports replacing GS with characters
0x20-0x7E in ASCII.

The replacement method is as follows:

(1) Read the setting code of "GS character replacement enable".

(2) Read the setting code of "GS replacement character modification".

(3) The character replaced by GS is represented by two hexadecimal values, and the corresponding hexadecimal conversion table of the character is shown in Appendix F

(4) Read the "Save" setting code:

GS Character replacement enable	**GS Character replacement prohibited

Read the following setting codes. With the “Data Code" setting code and the “Save" setting code, the user can modify the GS replacement characters.

GS Replacement character modification	

6.9 URL code reading

Read the following setting codes to allow and prohibit settings for the URL code reading function.

**Allow to read URL codes	Prohibit reading URL codes

7. Barcode Setting

7.1 Global shortcuts

7.1.1 Global operation

Users can read the following setting codes to enable/disable reading globally and enable the default reading type for all supported symbologies. After prohibiting reading all types of symbologies, only setting codes are allowed to be read.

Allow reading all types	Prohibit reading all types
**Open the default reading type	

7.1.2 Commodity barcode check digit output enable

The user can read the following setting codes to allow/prohibit the output of the product barcode check digit (the product barcode includes: EAN13/EAN8/UPC-A/UPC-E0/UPC-E1).

Allow product code check digit output	Prohibit the output of product code check digit

7.1.3 Improved literacy

Enabling and disabling the enhanced barcode reading ability can be performed by reading the following setting codes. After the enhanced reading ability is enabled, the ability to read special codes such as stained barcodes and QR code curved surfaces can be improved. Enhancing the literacy ability will increase the decoding speed.

**Prohibition of strengthening literacy	Reading ability enhancement enable

7.2 EAN 13

7.2.1 Permit and Prohibit the reading function

The user can allow or prohibit the EAN 13 barcode reading function by reading the following setting codes.

 **Allow EAN 13 reading	 Prohibit EAN 13 reading

7.2.2 Additional code forced output function allows and prohibits

The user can enable or disable the forced output function of EAN 13 additional codes by reading the following setting codes.

 EAN 13 Force output additional code	 **EAN 13 No additional code required

Users can read the following setting codes to configure the EAN 13 additional code enabling and disabling.

 EAN 13-2-digit additional code enable	 **EAN 13-2-digit additional code disable
 EAN 13-5-digit additional code enable	 **EAN 13-5-digit additional code disable

7.3 EAN 8

7.3.1 Data segment interception

The user can allow or prohibit the EAN 8 barcode reading function by reading the following setting codes.

 **Allow EAN 8 reading	 Prohibit EAN 8 reading

7.3.2 Additional code forced output function allows and prohibits

Users can enable or disable the forced output of EAN 8 additional codes by reading the following setting codes.

 EAN 8 Force output additional code	 **EAN 8 No additional code required

Users can read the following setting codes to configure the EAN 8 additional code enabling and disabling.

 EAN 8-2-digit additional code enable	 **EAN 8-2-digit additional code disable
 EAN 8-5-digit additional code enable	 **EAN 8-5-digit additional code disable

7.4 UPC-A

7.4.1 Permit and prohibit the reading function

The user can allow and prohibit the UPC-A barcode reading function by reading the following setting codes.

	
**Allow UPC-A reading	Prohibit UPC-A reading

7.4.2 Additional code forced output function allows and prohibits

	
UPC-A Force output additional code	**UPC-A No additional output required

Users can read the following setting codes to configure the UPC-A additional code enabling and disabling.

	
UPC-A-2-digit additional code enable	**UPC-A-2-digit additional code disable
	
UPC-A-5-digit additional code enable	**UPC-A-5-digit additional code disable

7.4.3 UPC-A conversion EAN 13 enable

The user can allow/disable the conversion of UPC-A to EAN 13 by reading the following setting codes.

Allow UPC-A to EAN 13	**Prohibit UPC-A to EAN 13

7.5 UPC-E0

7.5.1 Permit and prohibit the reading function

The user can allow and prohibit the UPC-E0 barcode reading function by reading the following setting codes.

**Allow UPC-E0 reading	Prohibit UPC-E0 reading

7.5.2 Additional code forced output function allows and prohibits

The user can enable and disable the UPC-E0 additional code forced output function by reading the following setting codes.

UPC-E0 Force output additional code	**UPC-E0 No additional code required

Users can read the following setting codes to configure the UPC-E0 additional code enabling and disabling.

 UPC-E0-2-digit additional code enable	 **UPC-E0-2-digit additional code disable
 UPC-E0-5-digit additional code enable	 **UPC-E0-5-digit additional code disable

7.6 UPC-E1

7.6.1 Permit and prohibit the reading function

The user can allow and prohibit the UPC-E1 barcode reading function by reading the following setting codes.

 **Allow UPC-E1 reading	 Prohibit UPC-E1 reading

7.6.2 Additional code forced output function allows and prohibits

The user can enable and disable the UPC-E1 additional code forced output function by reading the following setting codes.

 UPC-E1 Force output additional code	 **UPC-E1 No additional output required

Users can read the following setting codes to configure the UPC-E1 additional code enabling and disabling.

 UPC-E1-2-digit additional code enable	 **UPC-E1-2-digit additional code disable
 UPC-E1-5-digit additional code enable	 **UPC-E1-5-digit additional code disable

7.7 Code 128

7.7.1 Permit and prohibit the reading function

The user can enable or disable the Code 128 barcode reading function by reading the following setting codes.

 **Allow Code 128 reading	 Prohibit Code 128 reading

7.7.2 Reading length setting

Users can set the shortest and longest reading length of Code 128 by reading the following setting codes.

 Code 128 min length of the message 0	 **Code 128 min length of the message 4

 **Code 128 max length of the message 32	 Code 128 max length of the message 255

7.8 Code 39

7.8.1 Permit and prohibit the reading function

The user can enable or disable the barcode reading function of Code 39 by reading the following setting codes.

 **Allow Code 39 reading	 Prohibit Code 39 reading

7.8.2 Reading length setting

Users can set the shortest and longest reading length of Code 39 by reading the following setting codes.

 Code 39 min length of the message 0	 **Code 39 min length of the message 4
 **Code 39 max length of the message 32	 Code 39 max length of the message 255

7.8.3 Start character and end character output settings

The user can set the output of Code 39 start character and end character by reading the following setting codes.

 Code 39 Start character output	 **Code 39 start character is not output
 Code 39 Terminator output	 **Code 39 Terminator is not output

7.8.4 Code 32 Mode

Users can set whether Code 39 supports Code 32 mode by reading the following setting codes.

 Support Code 32 mode	 **Not support Code 32 mode

The user can set whether to output the Code 32 prefix by reading the following setting codes.

 **Code 32 Prefix A output	 Code 32 Prefix A not output

7.8.5 Full Asc Mode

Users can set whether Code 39 supports Full Asc mode by reading the following setting codes.

 Support Full Asc Mode	 **Not support Full Asc Mode

7.9 Code Bar

7.9.1 Permit and prohibit the reading function

The user can enable or disable the Code 93 barcode reading function by reading the following setting codes.

 **Allow CodaBar reading	 Prohibit CodaBar reading

7.9.2 Reading length setting

Users can set the shortest and longest reading length of Code 93 by reading the following setting codes.

 CodaBar min length of the message 0	 **CodaBar min length of the message 4
 **CodaBar max length of the message 32	 CodaBar max length of the message 255

7.9.3 Start character and end character output settings

The user can set the start and end symbol output of CodaBar by reading the following setting codes.

 CodaBar Start and end character output	 **CodaBar Start and end characters not output

7.10 Interleaved 2 of 5

7.10.1 Permit and prohibit the reading function

Users can enable or disable the Interleaved 2 of 5 barcode reading function by reading the following setting codes.

 Allow Interleaved 2 of 5 reading	 **Prohibit Interleaved 2 of 5 reading

7.10.2 Reading length setting

Users can set the shortest and longest reading length of Interleaved 2 of 5 by reading the following setting codes.

 Interleaved 2 of 5 min length of the message 0	 **Interleaved 2 of 5 min length of the message 4
 **Interleaved 2 of 5 max length of the message 32	 Interleaved 2 of 5 max length of the message 255

7.11 Industrial 25

7.11.1 Permit and prohibit the reading function

Users can enable and disable the barcode reading function of Industrial 25 by reading the following setting codes.

 Allow Industrial 25 reading	 ** Prohibit Industrial 25 reading

7.11.2 Reading length setting

Users can set the shortest and longest reading length of Industrial 25 by reading the following setting codes.

 Industrial 25 min length of the message 0	 ** Industrial 25min length of the message 4
 ** Industrial 25 max length of the message 32	 Industrial 25 max length of the message 255

7.12 Matrix 2 of 5

7.12.1 Permit and prohibit the reading function

Users can enable or disable the Matrix 2 of 5 barcode reading function by reading the following setting codes.

 Allow Matrix 2 of 5 reading	 ** Prohibit Matrix 2 of 5 reading

7.12.2 Reading length setting

Users can set the shortest and longest reading length of Matrix 2 of 5 by reading the following setting codes.

 Matrix 2 of 5 min length of the message 0	 ** Matrix 2 of 5min length of the message 4
 ** Matrix 2 of 5 max length of the message 32	 Matrix 2 of 5 max length of the message 255

7.12.3 Verify format setting

Users can set the Matrix 2 of 5 verification format by reading the following setting codes.

 Matrix2 of 5 verification format is Mod 10	 ** Matrix 2 of 5 verification format is None 10

7.13 Code 11

7.13.1. Permit and prohibit the reading function

Users can enable and disable the Code 11 barcode reading function by reading the following setting codes.

 Allow Code 11 reading	 ** Prohibit Code 11 reading

7.13.2. Reading length setting

Users can set the shortest and longest reading length of Code11 by reading the following setting codes.

Code 11 min length of the message 0	** Code 11 min length of the message 4
** Code 11 max length of the message 32	Code 11 max length of the message 255

7.13.3. Verification method setting

The user can set the Code 11 verification mode by reading the following setting codes.

Code 11-1 bit verification	Code 11-2 bit verification

7.14 MSI

7.14.1 Permit and prohibit the reading function

Allow MSI reading	** Prohibit MSI reading

7.14.2 Reading length setting

Users can set the shortest and longest reading length of MSI by reading the following setting codes.

MSI min length of the message 0	** MSI min length of the message 4
** MSI max length of the message 32	MSI max length of the message 255

7.15 RSS-14

7.15.1 Permit and prohibit the reading function

Users can enable and disable the RSS-14 barcode reading function by reading the following setting codes.

Allow RSS-14 reading	** Prohibit RSS-14 reading

7.16 Limited RSS

7.16.1 Permit and prohibit the reading function

Users can allow and prohibit the limited RSS barcode reading function by reading the following setting codes.

Allow limited RSS reading	** Prohibit limited RSS reading

7.16.2 Permit and prohibit the reading function

Users can allow and prohibit the restricted RSS barcode reading function by reading the following setting codes.

 Allow extended RSS reading	 ** Prohibit extended RSS reading

7.16.3 Reading length setting

 Extended RSS min length of the message 0	 ** Extended RSS min length of the message 4
 ** Extended RSS max length of the message 32	 Extended RSS max length of the message 255

7.17 Two-dimensional barcode operation

7.17.1 QR Code

Users can enable and disable the QR Code reading function by reading the following setting codes.

 ** Allow QR reading	 Prohibit QR reading

7.17.2 Data Matrix

Users can enable and disable the Data Matrix Code reading function by reading the following setting codes.

 ** Allow DM reading	 Prohibit DM reading

The user can allow and prohibit the simultaneous reading of multiple DM codes by reading the following setting codes.

 Allow reading multiple DM functions at same time	 ** Prohibit reading multiple DM functions at same time

7.1.3 PDF 417

 ** Allow PDF417 reading	 Prohibit PDF417 reading

8. Save and Cancel

8.1 Save

After reading "Data Code", you need to read the "Save" setting code to save the data.

 Save	

8.2 Cancel

When there is an error in reading the data, the following setting codes can be read to cancel the current setting, cancel the data read previously, and cancel a string of data read previously.

Cancel one bit of data previously read	Cancel a string of data previously read
Cancel current setting	

Note: To cancel the current setting, all the data codes read before are canceled, and the setting needs to be reset after canceling

9. Batch Processing Settings

When multiple settings are required to read the device, setting one by one may be cumbersome. The user can save all the information that needs to be set as a QR code, and the device can complete multiple settings after reading the QR code.

The following are the guidelines for batch processing:

(1) Batch processing setting code content format:
@WSM+ [Command parameter 1],
[Command parameter 2],
[Command parameter n]

For the command parameters that can be set in batches, please refer to Appendix G Batch Setting Command Parameter List.

(2) Every two parameters are separated by an English semicolon ";", and the end is ended by an English semicolon. Note that there can be no spaces between the semicolon and the command.

(3) The batch setting allows up to 30 parameter settings at the same time.

(4) Make the setting content that conforms to the batch processing setting code format as a QR code in the coding software and read the setting code for batch setting.

For example: turn on the setting code (command parameter: 00000000), induction mode (command parameter: 02000003), the fill light is on when taking pictures (command parameter: 03000000), single reading time -3000ms (command parameter: 0202001E), prohibition Read the command code of Interleaved 2 of 5 (command parameter: 070A0100), then the batch setting code content is as follows:

@WSM00000000; 02000003; 03000000; 0202001E; 070A0100;

When batch setting is required, the setting can be completed by reading the batch setting code that has been produced.

Note:

- When performing batch settings, you must ensure that "setup code is turned on".
- If the content of the batch setting code does not meet the setting code rules, or the setting command parameters are not included in the list of settable parameters, the setting failure will occur.

10. Appendix

NUL	SOH	STX	ETX
EOT	ENQ	ACK	BEL
BS	HT	LF	VT

 FF	 CR	 SO	 SI
 DLE	 DC1	 DC2	 DC3
 DC4	 NAK	 SYN	 ETB
 CAN	 EM	 SUB	 ESC
 FS	 GS	 RS	 US
 SP	 !	 "	 #

 $	 %	 &	 `
 (	)	 *	 +
 ,	 -	 .	 /
 0	 1	 2	 3
 4	 5	 6	 7
 8	 9	 :	 ;

 <	 =	 >	 ?
 @	 A	 B	 C
 D	 E	 F	 G
 H	 I	 J	 K
 L	 M	 N	 O
 P	 Q	 R	 S

 T	 U	 V	 W
 X	 Y	 Z	 [
 \	]	 ^	 _
 '	 a	 b	 c
 d	 e	 f	 g
 h	 i	 j	 k

 l	 m	 n	 o
 p	 q	 r	 s
 t	 u	 v	 w
 x	 y	 z	 {
 |	 }	 ~	 DEL

The complete EU Declaration of Conformity can be found at the following link:
https://dpp.digitus.com/4016032473657