# RM1802C Setup Manual

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# Chapter 1 Operation Settings

In most cases, the factory default settings of the scanning module can meet the needs of users to put it into use directly. You can also set the parameters through the setting code according to the actual use needs.

## 1.1 Use setting code

Read the "open setting code" to read the module function configuration (setting code function). After the function is enabled, one or more setting codes can be read to modify the parameters of the reading module. Read.. After the "closing setting code" is selected, the reading module will exit the setting state.

* * Turn on the setting code

Turn off the setting code

Set the code content output enable and disable.

Output setting code content

* * Do not output setting code content

Note: The option marked with (* *) in the setting code indicates the default function or parameter.

## 1.2 Restore factory default

After reading this setting code, the current parameter setting will be lost and the factory default value will be restored. Refer to Appendix C for factory default parameters and functions.

Restore factory defaults

Note: Use the Restore Factory Defaults feature with caution.

## 1.3 User Default Settings

In addition to restoring the factory settings, the user can save the common settings as the user default settings. By reading "Save current settings as user default", the current device configuration can be saved as user default information, so that you can make quick settings when needed.

You can restore the default settings saved by the user by reading Restore User Defaults.

Saves the current settings as the user default settings

restores the user default settings

# Chapter 2 Communication Interface

The scanning module provides TTL-232 serial communication interface and USB interface (optional function) to communicate with the host. The data can be received and read through the communication interface.

## 2.1 Communication mode selection

The factory default is to use USB-HID mode for communication. The user can switch between the output modes of the communication port (TTL-232 serial port mode/virtual serial port/USB-HID mode) by setting the scanning code. When users need USB and serial port output at the same time, they can select HID & TTL simultaneous output mode by reading the setting code. When the user switches the communication mode, it is necessary to wait for the completion of device initialization before performing related operations.

Note 1: When the module is set as a USB virtual serial port and communicates with the host through this port, the host needs to install the corresponding driver.

Note 2: USB uses 2 numbers to identify the device and find the correct one. The VID & PID information is shown in the following table:

| Interface type | VID (hexadecimal) | PID (hexadecimal) |
|---|---|---|
| Virtual serial port | 0x152A | 0x880F |
| HID-KBW | 0x1FC9 | 0x5AA7 |
| HID-POS | 0x1FCA | 0x5AA8 |

### 2.1.1 Output mode of communication port

1. Read the following setting code to set the communication output mode.

TTL-232 Serial Mode

* * USB-HID Mode

TTL-232 Mode

USB-HID Virtual Serial Mode

## 2.2 Serial communication interface

Serial communication interface is a common way to connect the reading module and the host device. When using the serial communication interface, the reading module and the host device must be completely matched in the configuration of communication parameters to ensure smooth communication and correct content.

The serial communication interface provided by the reading module is a TTL level signal. The form of TTL-232 can be connected to most application architectures, but when the form of RS-232 must be used, a conversion circuit needs to be added externally.

The default serial communication parameters of the reading module are shown in the following table. If they are inconsistent with the host equipment, they can be modified by reading the setting code.

**TTL-232 default communication parameters:**

| Parameter | Default |
|---|---|
| Serial communication type | Standard TTL-232 |
| Baud Rate | 9600 |
| Parity (Parity Type) | None |
| Data Bits | 8 |
| Stop Bits | 1 |

### 2.2.1 Baud rate

The unit of Baud Rate is bits per second (bps), and the following setting codes can be read to select configuration parameters.

1200bps

4800bps

**9600bps

14400bps

19200bps

38400bps

57600bps

115200bps

### 2.2.2 Verification mode

There are 3 selectable verification methods, as follows:

* * None

Odd Parity

Even Parity

## 2.3 Configuration related to USB-HID interface

### 2.3.1 Selection of HID equipment

When the device is an HID class device, it can be 2 different devices. The user can configure it by reading the following setting code.

**HID-KBW

HID-POS

**HID-POS Get Scan Data**

| **Data transmission** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Bit** | | | | | | | |
| Byte | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
| 0 | Message ID = 0xfd | | | | | | | |
| 1 | Bar code data length | | | | | | | |
| 2 | Fixed value 0 xff | | | | | | | |
| 3~62 | Fixed value 0 x51 | | | | | | | |
| 63 | 0 x01 (Packets Following)/0 x0 (Packets Not Following) | | | | | | | |

| **Data reception** | |
|---|---|
| | **Bit** |

| Byte | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|---|---|---|---|---|---|---|---|---|
| 0 | Message ID = 0x02 | | | | | | | |
| 1 | Bar code data length | | | | | | | |
| 2 | Fixed value 0 x5d | | | | | | | |
| 3 | Fixed value 0 x51 | | | | | | | |
| 4 | Fixed value 0 x31 | | | | | | | |
| 5-60 | Bar code data | | | | | | | |
| 61 | Fixed value 0 x51 | | | | | | | |
| 62 | Fixed value 0 x51 | | | | | | | |
| 63 | 0 x01 (Packets Following)/0 x0 (Packets Not Following) | | | | | | | |

### 2.3.2 PC access cycle to HID device

Read the following setting code to modify the access cycle of PC to HID device. The cycle range is 1ms ~ 64ms.

**1ms

3ms

5ms

10ms

### 2.3.3 Time interval before HID release

Read the following setting codes to modify the time interval before HID release (i.e., the time interval from the effective message to the released message). Interval range: 1ms ~ 63ms

**1ms

2ms

5ms

10ms

### 2.3.4 Time interval after HID release

Read the following setting codes to modify the time interval after HID release (i.e., the time interval from the release of message to the next valid message). Interval range: 1ms ~ 63ms

**1ms

2ms

5ms

10ms

### 2.3.5 CapsLock status settings

** CapsLock-Off

CapsLock-On

### 2.3.6 HID Leading Key Output

Users can read the following setting codes to make HID output a leading message before outputting each section of data, which is convenient for customer software development and positioning. The key value is Ctrl + Shift + R.

* * HID Preamble Prohibit

HID Preamble Allow

# Chapter 3 Reading Mode

## 3.1 Manual mode

Manual mode is the default reading mode. In the manual mode, press the trigger button, and the reading module starts shooting and reading; within the limited time range of "single code reading duration", if the reading is successful, the reading module will output the read content through the communication interface and stop reading. If a new reading needs to be started, the button needs to be triggered again. If the reading exceeds the duration of single code reading, the shooting and reading will be stopped.

* * Manual Mode

### 3.1.1 Trigger conditions

In manual mode, you can select the trigger condition, which defaults to level triggering, or you can select edge triggering.

Edge trigger means that the level pulse of the trigger signal is detected to start reading, and the reading is ended when the reading is successful or the condition of single code reading duration is reached.

The level trigger condition refers to the level of the trigger signal that needs to be maintained from the start of reading to the end of reading. When the trigger level is canceled, the reading is successful, or the reading exceeds the duration of single code reading, the reading is ended.

Edge trigger

* * Level trigger

### 3.1.2 Duration of single code reading

The duration of a single reading is the maximum time allowed to hold a reading attempt without a successful reading after the reading is triggered. When this time is exceeded, the read state will be exited. The duration of single code reading ranges from 100ms to 25500ms. Read the following setting codes to set the duration of single code reading.

1000ms

3000ms

**5000ms

10000ms

Infinite length

### 3.1.3 Deep Sleep

The deep sleep can be set by the following setting code. Deep sleep is enabled, and the module automatically enters deep sleep after being idle for a certain time.

Deep Sleep-On

* * Deep Sleep-Off

Note 1: After entering the deep sleep mode, you can wake up through the key or serial port command to exit the sleep mode.

Note 2: The deep sleep function is only effective in manual mode and TTL-232 serial mode output.

## 3.2 Command trigger mode

In the command trigger mode, the reading module starts shooting and reading when it receives the trigger signal command sent by the host (that is, write "1" to the bit 0 of the flag bit 0x0002); Within the limited time range of "single code reading duration", if the reading is successful, the reading module will output the reading content through the communication interface and stop reading. If it is necessary to start a new reading, it is necessary to resend the trigger command. If the reading exceeds the duration of single

code reading, the reading will be stopped.

Command trigger mode

Note: In the 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 to the write success command: 02 00 00 01 00 33 31, and the read mode is enabled.

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

Trigger Command Ack Forbidden

* * Trigger Command Ack Allowed

### 3.2.1 Duration of single code reading

Please refer to Section 3.1.2 "Setting code of duration of single code reading" for setting of duration of single code reading.

## 3.3 Continuous mode

The continuous mode is a working mode in which the reading module continuously and circularly shoots, reads and outputs information.

In this mode, the reading interval of 1000ms will be entered by default after successful reading.
In continuous mode, continuous reading can be paused or resumed using the trigger level control. In case of continuous reading, it is required to maintain the trigger level for more than 50ms and then cancel, and

the reading will be suspended; in case of suspended reading, it is required to maintain the trigger level for more than 50ms and then cancel, and the reading will be continued.

Continuous mode

### 3.3.1 Duration of reading interval

It refers to the interval required for the next reading after successful reading. No acquisition reading is performed during this interval. 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

500ms

**1000ms

3000ms

5000ms

### 3.3.2 Code reading delay of the same code

In order to prevent the same bar code from being read continuously for many times in the continuous mode, the reading module can be required to read the same bar code after a set delay time in this mode. The same code reading delay refers to the refusal to read the same barcode within the set duration after reading a barcode. It can be read and output only after the time is exceeded. By default, the same code reading delay is turned off.

Same code reading delay ON

* * Same code reading delay OFF

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

Note: The delay duration can be set only after the "same code reading delay" is enabled.

500ms

1000ms

3000ms

5000ms

Infinite delay

### 3.3.3 Duration of single code reading

Please refer to Section 3.1.2 "Setting code of duration of single code reading" for setting of duration of single code reading.

### 3.3.4 Continuous Mode Key Pause Switch

When "Continuous mode key pause support" is set, press the key for the first time to pause the continuous mode trigger, and press the key again to enable the continuous mode trigger; when "Continuous mode key pause not supported" is set, the key is invalid for continuous mode.

The continuous mode key pause switch can be set by the user through the following setting codes.

* * Continuous mode key pause is supported

Continuous mode key pause is not supported

## 3.4 Sensing Mode

The sensing mode refers to a working mode in which the reading module enters the reading mode by sensing the brightness change of the surrounding environment. When the scene changes, the reading module starts to read. After successful reading of output information or timeout of single code reading duration, the reading module can re-enter the monitoring state after a certain time interval (which can be set).If the following conditions do not occur, the reading module will work circularly in the above way: if the bar code is not scanned within the single code reading time, the reading module will automatically suspend the code 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 key, and continue to monitor the brightness

of the surrounding environment when the code reading is successful and the information is output or the trigger key is released.

Induction mode

### 3.4.1 Duration of single code reading

Please refer to Section 3.1.2 "Setting code of duration of single code reading" for setting of duration of single code reading.

### 3.4.2 Reading interval duration

Please refer to Section 3.3.1 Reading Interval Duration Setting Code for setting the reading interval duration.

### 3.4.3 Code reading delay of the same code

Please refer to 3.3.2 for setting of code reading delay of the same code. The same code reading delay setting code is set.

### 3.4.4 Sensitivity

Sensitivity refers to the degree of change in the detected scene in the inductive 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 (normal sensitivity and high sensitivity are preferred).

Low Sensitivity

* * Normal Sensitivity

High sensitivity

ultra-high sensitivity

### 3.4.5 Image stabilization duration

The image stabilization duration refers to the time that the reading module that detects the scene change needs to wait for the image stabilization before reading the code in the inductive reading mode. The image stabilization duration can be set from 0 to 25500 ms with a step of 100ms. The default stabilization time is 0 ms.

**0ms

100ms

400ms

1000ms

2000ms

# Chapter 4 Fill Light and Positioning

## 4.1 Light filling

A group of LEDs on the reading module is specially equipped for providing auxiliary supplementary light when shooting and reading, irradiating the light beam on the reading target, and improving the reading performance and the adaptability under weak environmental illumination. You can set it according to the actual use conditions:

Fill light-On when taking a picture: The fill light is on when taking a picture and off at other times.

Fill light-normally on: the fill light will continue to emit light after the reading module is powered on.

Fill light-normally off: The fill light does not turn on under any circumstances.

* * Fill light-lights up when taking pictures

Fill light-normally on

Fill light-normally off

## 4.2 Positioning

The reading module is provided with an auxiliary positioning device which projects an indication line to prompt a user of the center of the scene image shot by the reading module when shooting and reading.

When taking a picture, the positioning light is on: the positioning light is on when taking a picture and off at other times.

The positioning light is always on when taking pictures: the positioning light is always on when

taking pictures and off at other times.

The positioning light is always on: the positioning light is on continuously after the reading module is started.

The positioning light is always off: the positioning light is not on in any case.

* * Locating light-turn on the locating light when taking

pictures-always on when taking pictures

Locating lamp-normally

Locating lamp-normally off

# Chapter 5 Prompt Output

## 5.1 Buzzer master switch

Read the setting code below to turn on/off all beeps.

Mute * * Unmute

## 5.2 Buzzer setting

### 5.2.1 Passive buzzer

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

* * Passive buzzer

Passive _ LF

* * Passive _ IF

Passive _ HF

### 5.2.2 Active buzzer

Read the following setting code to set the buzzer as active and set the working level of the active buzzer. Read "high level", the buzzer is set to active low level when idle and active high level when working; read "low level", the buzzer is set to active high level when idle and active low level when working.

Active buzzer

* * High Level

Low Level

## 5.3 Prompt sound of setting code

Read the setting code below to turn on/off the setting code prompt tone.

*** * Set Tone _ On**

**Set Tone _ Off**

## 5.4 Startup prompt tone

When the reading module is powered on and started successfully, it can output or turn off the startup prompt tone according to the setting requirements.

* * Power On Tone Tone-On

Power On Tone Tone-Off

## 5.5 Reading success prompt LED/prompt tone

After successful reading, the reading module outputs BEEP and DLED prompt signals through the 12pin external interface by default, and prompts through the external passive buzzer and LED. These signals can be turned off according to user requirements.

* * Turn on reading success prompt LED

Turn off reading success prompt LED

* * Turn on the prompt tone of successful reading

Turn off the prompt tone of successful reading

**The user can set the BEEP duration of the successfully read tone by reading the following setting code.**

30ms

**60ms

90ms

120ms

## 5.6 Data output coding format

The user can set the output format of the reading module through the following setting codes, so that the host can output Chinese data according to the specified coding format.

Note: GBK format is used for Notepad, and UNICODE format is used for Word and common chat tool input boxes.

Original data output, used for serial port output of encrypted data.

* * Output Data Format-GBK

Output Data Format-UTF8

Output Data Format-Raw Data

Output Data Format-UNICODE

## 5.7 Keyboard settings for each country

In order to adapt to each country, the device can be set to the "keyboard" corresponding to each country through the following setting code.

* * US Keyboard

Czech Keyboard

French keyboard

German keyboard

Hungarian keyboards

Italian keyboards

Japanese keyboard

Spanish keyboard

Turkish Q Keyboard

Turkish F Keyboard

Mexican Keyboard (Latin)

## 5.8 Virtual keyboard enabled

In order to adapt to the application environment in more regions, you can read the following setting codes to set the output of the standard/virtual keyboard. But it will lose some output efficiency. Note that when using the virtual keyboard, it is necessary to ensure that the number keys of the keypad on the PC side are enabled.

* * Standard keyboard

Virtual keyboard

**1. Virtual keyboard output mode**

In order to adapt to different application scenarios, the virtual keyboard has two different output modes for control characters less than 0x20, and the user can switch by scanning the following setting

codes.

Ctrl Mode | Alt Mode | * * Control Character Output Off

**2. Control character transmission**

ASCII characters between 0x00 and 0x1F can be escaped to become a control function key. When the virtual keyboard is enabled (other HID Keyboards of the module are set to the default value), the input operation of the control function key is as follows: (for the specific correspondence between the ASCII value and the control function key, please refer to the Control Character Correspondence Table)

**(1) Virtual keyboard Ctrl mode on**

Read the characters with the data of "A < HT > F (HT is an invisible character, not displayed on the terminal software)" (hexadecimal values are 0x41/0x09/0x46 respectively), and the virtual keyboard of the scanning module is operated as follows:

Enter "A" -- press key A;

Enter "Ctrl I" -- Since the data of 0x09 corresponds to the control function key "I", the virtual keyboard will press and hold Ctrl, then press the I key, and finally release the Ctrl key and I key at the same time;

Enter "F" -- Press key F.

Because "Ctrl I" corresponds to the function of converting characters to italic in some word processing software, you may see the normal character "A" and the italic "F" when you complete the above operation.

At present, in the small module of the scanning gun, the virtual keyboard "Ctrl mode" control character output only supports the American keyboard layout.

**(2) Alt mode of virtual keyboard**

If the virtual keyboard is turned on and set to "Alt mode", the control character operation

corresponding to the output is: ALT + "ASCII code decimal value corresponding to the character". For example, for the "< HT >" character, the virtual keyboard of the scanning module operates as follows:

Enter "Alt 0 9" -- The virtual keyboard will press and hold Alt, then press "0" and "9" on the numeric keypad, and then release Alt.

When the standard keyboard is output, the control character output function is closed, and the ASCII character less than 0x20 will output the corresponding key value function. (For the corresponding function, please refer to the corresponding table of control characters)

Control character correspondence table

| ASCII Function | ASCII Value (HEX) | Control character output off | Control Character Output Ctrl Mode | CTRL + X function |
|---|---|---|---|---|
| NUL | 0 | Null | Ctrl+@ | |
| SOH | 1 | KeypadEnter | Ctrl+A | Select all |
| STX | 2 | CapsLock | Ctrl+B | Bold |
| ETX | 3 | ALT | Ctrl+C | Copy |
| EOT | 4 | Null | Ctrl+D | Bookmark |
| ENQ | 5 | CTRL | Ctrl+E | Center |
| ACK | 6 | Null | Ctrl+F | Find |
| BEL | 7 | Enter | Ctrl+G | |
| BS | 8 | LeftArrow | Ctrl+H | History |
| HT | 9 | Horizontal Tab | Ctrl+I | Italic |
| LF | 0A | DownArrow | Ctrl+J | Justify |
| VT | 0B | Vertical Tab | Ctrl+K | hyperlink |
| FF | 0C | Delete | Ctrl+L | list,left align |
| CR | 0D | Enter | Ctrl+M | |
| SO | 0E | Insert | Ctrl+N | New |
| SI | 0F | Esc | Ctrl+O | Open |
| DLE | 10 | F11 | Ctrl+P | Print |
| DC1 | 11 | Home | Ctrl+Q | Quit |

| | | | | |
|---|---|---|---|---|
| DC2 | 12 | PrintScreen | Ctrl+R | |
| DC3 | 13 | Backspace | Ctrl+S | Save |
| DC4 | 14 | tab+shift | Ctrl+T | |
| NAK | 15 | F12 | Ctrl+U | |
| SYN | 16 | F1 | Ctrl+V | Paste |
| ETB | 17 | F2 | Ctrl+W | |
| CAN | 18 | F3 | Ctrl+X | |
| EM | 19 | F4 | Ctrl+Y | |
| SUB | 1A | F5 | Ctrl+Z | |
| ESC | 1B | F6 | Ctrl+[ | |
| FS | 1C | F7 | Ctrl+\ | |
| GS | 1D | F8 | Ctrl+] | |
| RS | 1E | F9 | Ctrl+6 | |
| US | 1F | F10 | Ctrl+- | |

## 5.9 Output Chinese shielding

After this function is enabled, the reading module will shield the Chinese output. The user can open and close the Chinese output shielding function by reading the following setting codes.

* * Output data does not mask Chinese

Output data masks Chinese

## 5.10 Analog Keypad

### 5.10.1 Keypad numeric function output

If this function is not enabled, all outputs will be output according to the corresponding key value of the large keyboard.

After the function is started, only the number "0 ~ 9" in the decoding data obtained by the reading

module is output according to the key value corresponding to the small keyboard, and the rest are output according to the key value corresponding to the large keyboard.

The user can turn on and off the digital output function of the analog keypad by reading the following setting codes.

Keypad Digital Output-On

* * Keypad Digital Output-Off

### 5.10.2 Keypad Operator Function Output

If this function is not enabled, all outputs will be output according to the corresponding key value of the large keyboard.

After the function is started, only "+" _ "*"/ "in the decoding data obtained by the reading module is output by pressing the key value corresponding to the small keyboard, and the rest are output by pressing the key value corresponding to the large keyboard.

The user can open and close the analog keypad operator output function by reading the following setting codes.

Keypad Operator Output-On

* * Keypad Operator Output-Off

## 5.11 base64 decoding mode

Base64 Decode On

* * base64 Decode Off

## 5.12 Image Mirror Mode

When the image has mirror inversion, you can enter the mirror inversion mode by reading the following setting code.

Image Mirror Flip-On

* * Image Mirror Flip-Off

Note: In the mirror inversion mode, only the bar code of mirror inversion can be identified. If you need to identify the normal bar code or set code, please exit the mirror inversion mode first.

## 5.13 Reverse reading mode

In some special application scenarios, it is necessary to read the special bar code of black and white inversion. The user can enable/disable the reading function of the inverted bar code by reading the following setting code.

* * Invert Disable

Invert Enable

## 5.14 Invoicing Mode

In order to facilitate the use of this module in the invoicing system, the user can configure the invoicing mode by reading the setting code, and realize the conversion and output of the invoice code format. Billing modes include local billing mode and online billing mode. When the invoicing mode is enabled, the default is the local invoicing mode.

Users can realize the conversion and output of invoice code format by reading the following setting codes.

* * Invoicing mode enabled

Invoicing mode disabled

After the invoice mode is enabled, the invoicing mode can be selected by reading the following setting codes.

* * Local invoicing mode

Online invoicing mode

It should be noted that when the user uses the online invoicing mode, the module must be switched to the HID-POS output mode only and used in conjunction with the Weisheng Micro Invoicing Assistant.

## 5.15 Read device version information

The user can read the following setting codes to quickly obtain the current device version information and all device version information.

Read device version information

Read all device version information

**Example:**

（1）. Using the scanner to identify and read the device version information setting code

Output information: HS: V1.00; F:V1.1.71; 2022.06.09

HS: 1.00 means the hardware version is 1.00

F:V1.1.71; 2022.06.09 means that the APP version is 1.1.71 and the APP version date is 2022.06.09.

（2）. Using the scanner to identify and read all information setting codes of the equipment version

HS:V1.00; QR_BOOT:V1.1.8-21.07.29; QR_APP:V1.1.71-22.06.09 ; LIB:V2.2.95

HS:V1.00; The hardware version is 1.00

QR_BOOT:V1.1.8-21.07.29; The BOOT version is 1.1.8, and the BOOT version date is 2021.07.29.

QR_APP:V1.1.71-22.06.09 ; That is, the APP version is 1.1.71 and the APP version date is 2022.06.09.

## 5.16 Write/Read Device

Users can read and write ID through serial port or virtual serial port.

**ID information includes: SN: product serial number**

FID: Vendor Information

MID: Product Model

ID up to 64 bytes (plain numbers and uppercase and lowercase letters)

**Write ID format:**

WriteDeviceID:SN:xxxx; MID:xxxx; FID: xxxx. (Can be changed as required)

The return value of the write ID instruction is the same as that of the write ID instruction

**Read ID format:**

ReadDeviceID.

Return: SN: xxxx; MID:xxxx; FID:xxxx.

For example, write device ID information for the device: SN: 20200508; MID:WSM1605; FID: WSM

2020., and read the device ID

Write ID:

Serial port sending: Write Device ID: SN: 20200508; MID:WSM1605; FID:WSM2020.

Serial port return: Write Device ID: SN: 20200508; MID:WSM1605; FID:WSM2020.

Read ID:

Serial port sending: Read DeviceID.

Serial port return: SN: 20200508; MID:WSM1605; FID:WSM2020.

Notes: 1. An instruction is followed by a "." As an end indicator.

2. When SN, FID and MID are not written, read the device DeviceID and return "SN: NULL;" MID: NULL; FID: NULL.”。

3. If the write command ID data does not meet the requirements or the command format is wrong, send the write command to return "FALSE" or not return, and the write fails.

The user can also read the DeviceID by reading the following setting code, and the return format is consistent with the reading of the sending instruction.

Read the device ID

## 5.17 Read Chip SN

The user can quickly obtain the SN information of the current equipment chip by reading the following setting codes.

Read the chip SN number

# Chapter 6 Data Editing

In practical applications, in order to facilitate data differentiation and processing, sometimes it is necessary to edit the reading data before output.

Data editing includes:

- Add Prefix
- Add Suffix
- Decoded data Data segment interception
- Output Barcode Code ID
- Output Barcode AIM ID
- Decoding failure characteristic output information (RF information)
- Add Tail

Processed output data format:

【Code ID】【AIM ID】【Prefix】【Data】【Suffix】【Tail】

## 6.1 Prefix

Prefix a user-defined string that precedes the decoded data. The user can read the following setting codes to add and modify the prefix.

Prefix allowed

* * Prefix not allowed

Read the following setting codes. With the "data code" setting code and the "save" setting code, the user can modify the prefix content.

Modify the prefix

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

## 6.2 Suffix

The suffix is a user-defined string that follows the decoded data. The user can add and modify the suffix by reading the following setting codes.

Suffix allowed

* * Suffix not allowed

Read the following setting codes. With the "data code" setting code and the "save" setting code, the user can modify the suffix content.

Modify the suffix

Note: The suffix allows a maximum of 15 characters and is represented by two hexadecimal values for each suffix character. 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 to be added

* * Prohibit Code ID from being added

Read the following setting code to restore the default Code ID value of the barcode. Refer to Appendix E for a list of defaults.

Restore Code ID Default

### 6.3.2 Modifying Code ID

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

Modify Code ID for EAN13

Modify Code ID for EAN8

Modify Code ID of UPC-A

Modify Code ID of UPC-E0

Modify Code ID of UPC-E1

Modify Code ID of Code 128

Modify Code ID for Code 39

Modify Code ID for Code 93

Modify Codabar's Code ID

Modify Interleaved 2 of 5's Code ID

Modify the Code ID of Industrial 25

Modify the Code ID of Matrix 2 of 5

Modify Code ID for Code11

Modify Code ID for MSI Plessey

Modify the Code ID of RSS-14

Modify the Code ID of Qualified RSS

Modify the Code ID of Extended RSS

Modify the Code ID of QR Code

Modify Code ID for Data Matrix

Modify Code ID for PDF 417

Modify the Code ID of Micro QR

Modify the Code ID of Han Xin Code

Modify the Code ID of Micro PDF 417

Modify the Code ID of Standard 2 of 5

Modify Code ID for Plessey

Modify Code ID for ChinaPost 25

Modify Code ID of Code 16K

Modify CODE ID of Code 49

Modify Code ID for Maxi Code

Modify Code ID for Aztec

Modifying the CODE ID of a GS1 Composite

## 6.4 AIM ID

### 6.4.1 Add AIM ID

AIM is the abbreviation of Automatic Identification Manufacturers. AIM ID defines identification codes for various standard bar codes. The specific definitions are in Appendix H. The scanner can add this identification number to the barcode data after decoding, that is, the AIM prefix. Prefix format: "]" + AIM prefix + number,

For example, the AIM ID prefix of Code 128 is "] C0".

Decode Message Adds AIM Prefix Character

* * Decode Message does not add AIM prefix character

### 6.4.2 Modifying AIM Location

After adding the prefix, Code ID, and AIM ID, you can read the following setting codes to change

their order.

* * CodeID + AIM + Custom

AIM + CodeID + Custom

AIM + Custom + CodeID

CodeID + Custom + AIM

Custom + CodeID + AIM

Custom + AIM + CodeID

## 6.5 Terminator (Tail)

Close End

* * Add CR End (0 x0D)

Add TAB end (0x09)

Add CRLF end (0 x0D 0 x0A)

## 6.6 Data section

### 6.6.1 Date Segment Interception

This feature is used in scenarios where the user needs to output partially decoded information.

The decoding information Data consists of 3 parts:

【Start】【Center】【End】

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

* * Transmit entire Data

Transmit Start segment only

Transmit End Segment Only

Transmit Center Segment Only

### 6.6.2 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 and combining the "Data Code" and "Save" setting codes. Both the Start and End segments are allowed up to 255 characters, and both are represented by a single hexadecimal character. Refer to Appendix F for the corresponding hexadecimal conversion table of characters.

Modify Start Segment Length

Modify End Segment Length

## 6.7 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 adjust or operate accordingly after detecting this information. The user is free to define the RF information.

Read the following setting code to enable/disable RF information transmission.

Allow to send RF information

* * Disable to send RF information

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

Modify the RF information

Note: When an odd number of hexadecimal values are entered, the last digit fails to be set and only the first few characters are output.

## 6.8 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 that decode result with protocol output is: < 03 > < length > < decode data >

Note: The protocol mode must adopt the encoding output format of UTF-8. In other output encoding formats, no matter whether the output with protocol is selected or not, only pure data can be output.

* * Data only output

with protocol output

## 6.9 GS Character Substitution

GS, as a group separator, was used in the European Food and Drug Administration barcode after the London Olympic Games in 2012. Because GS characters are not visible in many text display tools, some regions need to replace GS with character output that can be displayed. That is, the 0x1D byte in the ASCII code table is replaced with a displayable byte in ASCII.

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

The replacement method is as follows:

1）Read the "GS character replacement enable" setting code;

2) read that setting code of "GS replace character modification";

3) The characters replaced by GS are represented by two hexadecimal values. Refer to Appendix F for the hexadecimal conversion table corresponding to the characters;

4) Read the "Save" setting code.

GS character substitution enabled

* * GS character substitution disabled

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

GS Substitution Character Modification

## 6.10 Website code reading

Read the following setting codes to set the permission and prohibition of the address code reading function.

* * Allow reading web address code

Disable reading web address code

# Chapter 7 Shortcuts

## 7.1 Fast POS mode

Characteristics of POS mode:

- Read Mode: Command Trigger Mode
- Communication port: serial port
- Turn off the power-on tone
- Disables the addition of terminators

Users can quickly configure the reading device to work in POS mode by reading the following setting codes.

Fast POS mode

## 7.2 Serial port & full code open mode

In order to facilitate the customer to quickly configure to the serial port and full-code open mode in the secondary development process, the quick configuration function can be realized by reading the following setting codes.

Serial port & full code open mode

# Chapter 8 Code System Settings

## 8.1 Global Shortcuts

### 8.1.1 Global operation

The user can read the following setting codes to globally allow/prohibit the reading of all supported code systems and enable the operation of default reading type. Only the setting code is allowed to be read after all types of code systems are prohibited to be read.

Allow to read all types

Disable to read all types

* * Turn on the default reading type

### 8.1.2 Commodity barcode check bit output enable

Users can read the following setting codes to allow/prohibit the output of commodity barcode check bits (commodity barcodes include: EAN13/EAN8/UPC-A/UPC-E0/UPC-E1).

* * Allow commodity code check digit output

Prohibit commodity code check digit output

### 8.1.3 Enhancement of reading ability

The enhancement of barcode reading capability can be enabled and disabled by reading the following setting codes. After the reading ability enhancement is enabled, the reading ability of special codes such as defaced bar codes and QR code curved surfaces can be improved. Reading ability enhancement prohibition will increase the decoding speed.

* * Perception Enhancement Disable

Perception Enhancement Enable

## 8.2 One-dimensional barcode operation

### 8.2.1 EAN 13

**1. Permission and prohibition of reading function**

The user can read the following setting codes to enable and disable the EAN13 barcode reading function.

* * Allow EAN13 Read

Disable EAN13 Read

**2. Enabling and disabling of additional code forced output function**

The user can read the following setting codes to enable and disable the EAN13 additional code forced output function.

EAN13 is forced to output additional code

* * EAN13 is not required to output additional code

The user can read the following setting codes to configure the enabling and disabling of EAN13 additional codes.

EAN13-2 extra code enable

* * EAN13-2 extra code disable

EAN13-5-bit additional code enable

* * EAN13-5-bit additional code disable

**3. Check bit output function enable and disable**

* * Allow sending EAN13 check bits

Disable sending EAN13 check bits

### 8.2.2 EAN 8

**1. Permission and prohibition of reading function**

The user can read the following setting codes to enable and disable the EAN8 barcode reading function.

* * Enable EAN8 Read

Disable EAN8 Read

**2. Enabling and disabling of additional code forced output function**

The user can read the following setting codes to enable and disable the EAN8 additional code forced output function.

EAN8 forced to output additional code

* * EAN8 not required to output additional code

The user can read the following setting codes to configure the enabling and disabling of EAN8 additional codes.

EAN8-2-bit additional code enable

* * EAN8-2-bit additional code disable

EAN8-5 bits extra code enable

* * EAN8-5 bits extra code disable

**3. Check bit output function enable and disable**

* * Allow EAN8 check bits to be sent

Disable EAN8 check bits to be sent

### 8.2.3 UPC-A

**1. Permission and prohibition of reading function**

The user can read the following setting codes to enable and disable the UPC-a barcode reading

function.

* * Allow UPC-a Read

Disable UPC-a Read

**2. Enabling and disabling of additional code forced output function**

The user can read the following setting codes to enable and disable the UPC-a additional code forced output function.

UPC-a is forced to output additional codes

* * UPC-a does not require additional codes to be output

The user can read the following setting codes to configure the enabling and disabling of UPC-a additional code.

UPC-A-2 Bit Extra Code Enable

* * UPC-A-2 Bit Extra Code Disabled

UPC-A-5 Bit Extra Code Enable

* * UPC-A-5 Bit Extra Code Disabled

**3. UPC-a conversion EAN13 enabled**

The user can read the following setting code to enable/disable the conversion of UPC-a to EAN13.

Allow UPC-A to EAN13

* * Prohibit UPC-A to EAN13

**4. Check bit output function enable and disable**

* * Allow sending UPC-a check bits

Disable sending UPC-a check bits

### 8.2.4 UPC-E0

**1. Permission and prohibition of reading function**

The user can read the following setting codes to enable and disable the UPC-E0 barcode reading function.

* * Allow UPC-E0 to read

Disable UPC-E0 to read

**2. Enabling and disabling of additional code forced output function**

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

UPC-E0 is forced to output additional code

* * UPC-E0 is not required to output additional code

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

UPC-E0-2-bit additional code enable

* * UPC-E0-2-bit additional code disable

UPC-E0-5 Bit Extra Code Enable

* * UPC-E0-5 Bit Extra Code Disabled

**3. Check bit output function enable and disable**

* * Allow sending UPC-E0 check bits

Disable sending UPC-E0 check bits

## 8.2.5 UPC-E1

**1. Permission and prohibition of reading function**

The user can read the following setting codes to enable and disable the UPC-E1 barcode reading function.

* * Allow UPC-E1 Read

Disable UPC-E1 Read

**2. Enabling and disabling of additional code forced output function**

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

UPC-E1 is forced to output additional code

* * UPC-E1 is not required to output additional code

The user can read the following setting codes to configure the enabling and disabling of UPC-E1 additional codes.

UPC-E1-2 bit additional code enable

* * UPC-E1-2 bit additional code disable

UPC-E1-5 bits extra code enable

* * UPC-E1-5 bits extra code disable

**3. Check bit output function enable and disable**

* * Allow sending UPC-E1 check bits

Disable sending UPC-E1 check bits

### 8.2.6 Code128

**1. Permission and prohibition of reading function**

The user can read the following setting codes to enable and disable the Code 128 barcode reading function.

* * Allow Code 128 Read

Disable Code 128 Read

**2. Read length setting**

The user can read the following setting codes to set the minimum and maximum read lengths of Code128.

* * Code 128 information is 0

Code 128 information is 4.

Code 128 Message up to 32

* * Code 128 Message up to 255

**3. Code 128 plus prefix (11)**

The user can read the following setting code to enable or disable the Code 128 barcode prefix (11) function.

Code 128 plus prefix (11)-on

* * Code 128 plus prefix (11)-off

### 8.2.7 Code39

**1. Permission and prohibition of reading function**

The user can read the following setting codes to enable and disable the Code39 barcode reading function.

* * Allow Code39 to read

Disable Code39 to read

**2. Read length setting**

The user can read the following setting codes to set the minimum and maximum read lengths of

Code39.

* * Code39 message minimum length is 0

Code39 message minimum length is 4

The maximum length of Code39 message is 32

* * The maximum length of Code39 message is 255

**3. Start and End Output Settings**

The user can read the following setting codes to set the Code39 start and end symbol output.

Code39 start character output

* * Code39 start character is not output

Code39 Terminator Output

* * Code39 Terminator Not Output

**4. Code32 mode**

The user can read the following setting code to set whether Code39 supports Code32 mode.

Code32 mode supported

* * Code32 mode not supported

The user can read the following setting code to set whether the Code32 prefix is output.

* * Code32 Prefix A output

Code32 Prefix A not output

**5.FullAsc Mode**

The user can read the following setting code to set whether Code39 supports FullAsc mode.

FullAsc mode is supported

* * FullAsc mode is not supported

**6. Process the check**

The user can set whether Code39 processes the verification by reading the following setting code.

Code39 handles checksum

* * Code39 does not handle checksum

**7. Check digit output setting**

The user can read the following setting code to set whether Code39 outputs the check digit.

Code39 outputs check bits

* * Code39 does not output check bits

### 8.2.8 Code93

**1. Permission and prohibition of reading function**

The user can read the following setting codes to enable and disable the Code93 barcode reading function.

* * Allow Code93 to read

Disable Code93 to read

**2. Read length setting**

The user can read the following setting codes to set the minimum and maximum reading length of Code93.

* * Code93 message minimum length is 0

Code93 message minimum length is 4

Code93 information is 32

* * Code93 information is 255

### 8.2.9 CodaBar

**1. Permission and prohibition of reading function**

The user can read the following setting codes to enable and disable the CodaBar barcode reading function.

* * Allow CodaBar to read

Disable CodaBar to read

**2. Read length setting**

The user can set the minimum and maximum reading length of CodaBar by reading the following setting codes.

* * CodaBar message is 0

CodaBar message is 4.

CodaBar information is 32

* *CodaBar information is 255

**3. Start-stop output setting**

The user can read the following setting codes to set the CodaBar start-stop output.

CodaBar start-stop symbol output

* * CodaBar start-stop symbol is not output

**4. Verification processing**

The user can set the CodaBar verification processing by reading the following setting code.

* * CodaBar does not process check

CodaBar Mod10 checksum

CodaBar Mod16 Calibration

CodaBar Dual Calibration

**5. Check digit output setting**

The user can read the following setting code to set the CodaBar check bit output.

CodaBar check bit output

* * CodaBar check bit is not output

### 8.2.10 Interleaved 2 of 5

**1. Permission and prohibition of reading function**

The user can read the following setting codes to enable and disable the Interleaved 2 of 5 barcode reading function.

Allow Interleaved 2 of 5 Reading

* * Disable Interleaved 2 of 5 Reading

**2. Read length setting**

The user can read the following setting codes to set the minimum and maximum Interleaved 2 of 5 reading length.

Interleaved 2 of 5 messages have a minimum length of 0

* * Interleaved 2 of 5 messages have a minimum length of 4

* * Interleaved 2 of 5 messages up to 32 in length

Interleaved 2 of 5 messages up to 255 in length

**3. Validate format settings**

The user can read the following setting code to set whether to process Interleaved 2 of 5.

Interleaved 2 of 5 checksum format Mod10

* * Interleaved 2 of 5 checksum format NONE

**4. Check digit output setting**

The user can read the following setting code to set whether to output the check bit of Interleaved 2 of 5.

Interleaved 2 of 5 Output Check Bit

* * Interleaved 2 of 5 Does Not Output Check Bit

### 8.2.11 Industrial 25

**1. Permission and prohibition of reading function**

The user can read the following setting codes to enable and disable the Industrial 25 barcode reading function.

Allow Industrial 25 to read

* * Disable Industrial 25 to read

**2. Read length setting**

The user can read the following setting codes to set the minimum and maximum reading length of Industrial 25.

Industrial 25 message minimum length is 0

* * Industrial 25 message minimum length is 4

* * Industrial 25 message up to 32 in length

Industrial 25 message up to 255 in length

**3. Validate format settings**

The user can read the following setting code to set whether the Industrial 25 is processed or not.

Industrial 25 Calibration Format Mod10

* * Industrial 25 Calibration Format NONE

**4. Check digit output setting**

The user can read the following setting code to set whether the Industrial 25 outputs the check bit.

Industrial 25 Output Check Digits

* * Industrial 25 does not output check digit

## 8.2.12 Matrix 2 of 5

**1. Permission and prohibition of reading function**

The user can read the following setting codes to enable and disable the Matrix 2 of 5 bar code reading function.

Allow Matrix 2 of 5 to read

* * Disable Matrix 2 of 5 to read

**2. Read length setting**

The user can set the minimum and maximum reading length of Matrix 2 of 5 by reading the following setting codes.

Matrix 2 of 5 message minimum length 0

* * Matrix 2 of 5 message minimum length 4

* * Matrix 2 of 5 message up to 32 in length

Matrix 2 of 5 message up to 255 in length

**3. Validate format settings**

The user can set the Matrix 2 of 5 check format by reading the following setting code.

Matrix2 of 5 check format is Mod 10

* * Matrix 2 of 5 check format is None

**4. Check digit output setting**

The user can read the following setting code to set whether Matrix2 of 5 outputs the check bit.

Matrix2 of 5 Output Check Bit

* * Matrix2 of 5 does not output check bit

## 8.2.13 Code11

**1. Permission and prohibition of reading function**

The user can read the following setting codes to enable and disable the Code 11 barcode reading function.

Allow Code 11 to read

* * Disable Code 11 to read

**2. Read length setting**

The user can read the following setting codes to set the minimum and maximum reading length of Code11.

The minimum length of Code11 message is 0

* * The minimum length of Code11 message is 4

* *Code11 information is 32

Code11 information is 255.

**3. Verification mode setting**

The user can read the following setting code to set the Code11 verification mode.

* * Code 11-1bit check

Code 11-2bit check

**4. Check digit output setting**

The user can read the following setting code to set the Code11 check bit output.

Code 11 check digit output

* * Code 11 check digit is not output

## 8.2.14 MSI Plessey

**1. Permission and prohibition of reading function**

Allow MSI Plessey Read

* * Disable MSI Plessey Read

**2. Read length setting**

The user can set the minimum and maximum reading length of MSI Plessey by reading the following setting codes.

The minimum length of MSI Plessey message is 0

* * The minimum length of MSI Plessey message is 4

* * MSI Plessey Message up to 32

MSI Plessey Message up to 255

**3. Verification mode setting**

The user can read the following setting code to set the MSI Plessey verification mode.

* * MSI Plessey Single MOD 10 Check

MSI Plessey Dual MOD 10 Check

**4. Check digit output setting**

The user can set the MSI Plessey check bit output by reading the following setting code.

MSI Plessey Check Bit Output

* * MSI Plessey Check Bit Not Output

## 8.2.15 RSS-14

**1. Permission and prohibition of reading function**

The user can read the following setting codes to enable and disable the RSS-14 bar code reading function.

Allow RSS-14 reading

* * Disable RSS-14 reading

**2.AI () output enable and disable**

The user can read the following setting code to set whether the RSS-14 bar code AI () is output.

* * RSS-14 AI Output with Parentheses

RSS-14 AI Output without Parentheses

**3. Check bit output function enable and disable**

RSS-14 check bit output

* * RSS-14 check bit not output

## 8.2.16 Qualified RSS

**1. Permission and prohibition of reading function**

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

Allow reading of restricted RSS

* * Disable reading of restricted RSS

**2.AI () output enable and disable**

The user can read the following setting code to set whether the limited RSS barcode AI () is output.

* * Qualified RSS AI Parenthesized Output

Qualified RSS AI No Parenthesized Output

**3. Check bit output function enable and disable**

Qualified RSS check bit output

* * Qualified RSS check bit is not output

## 8.2.17 RSS Extended

**1. Permission and prohibition of reading function**

The user can read the following setting codes to enable and disable the extended RSS barcode reading function.

Enable reading of extended RSS

* * Disable reading of extended RSS

**2. Read length setting**

Minimum length of extended RSS message is 0

* * Minimum length of extended RSS message is 4

* * Extended RSS messages up to 32 in length

Extended RSS messages up to 255 in length

**3.AI () output enable and disable**

The user can read the following setting code to set whether the extended RSS barcode AI () is output.

* * Extended RSS AI Bracketed Output

Extended RSS AI No Bracketed Output

**4. Check bit output function enable and disable**

Extended RSS Check Bit Output

* * Extended RSS Check Bit is not output

## 8.2.18 Standard 2 of 5

**1. Permission and prohibition of reading function**

Allow Standard 2 of 5 reading

* * Disable Standard 2 of 5 reading

**2. Read length setting**

The user can read the following setting codes to set the minimum and maximum reading length of Standard 2 of 5.

Standard 2 of 5 messages have a minimum length of 0

* * Standard 2 of 5 messages have a minimum length of 4

* * Standard 2 of 5 messages up to 32 in length

Standard 2 of 5 messages up to 255 in length

**3. Verification mode setting**

The user can read the following setting code to set the Standard 2 of 5 verification mode.

Standard 2 of 5 Calibration On

* * Standard 2 of 5 Calibration Off

**4. Check digit output setting**

The user can set the MSI Plessey check bit output by reading the following setting code.

Standard 2 of 5 check digit output

* * Standard 2 of 5 check digit is not output

## 8.2.19 Plessey

**1. Permission and prohibition of reading function**

Allow Plessey to read

* * Disable Plessey to read

**2. Read length setting**

The user can set the Plessey minimum and maximum read lengths by reading the following setting codes.

Plessey message minimum length is 0

* * Plessey message minimum length is 4

* * Plessey messages up to 32 in length

Plessey messages up to 255 in length

**3. Verification mode setting**

The user can read the following setting code to set the Plessey verification mode.

Plessey Verification On

* * Plessey Verification Off

**4. Check digit output setting**

The user can set the MSI Plessey check bit output by reading the following setting code.

Plessey check bit output

* * Plessey check bit not output

## 8.2.20 ChinaPost 25

**1. Permission and prohibition of reading function**

Allow ChinaPost 25 to read

* * Prohibit ChinaPost 25 to read

**2. Read length setting**

The user can set the shortest and longest reading length of ChinaPost 25 by reading the following setting codes.

The shortest length of ChinaPost 25 message is 0

* * The shortest length of ChinaPost 25 message is 4

* * The maximum length of ChinaPost 25 message is 32.

The maximum length of ChinaPost 25 message is 255.

**3. Verification mode setting**

The user can read the following setting code to set the ChinaPost 25 verification mode.

ChinaPost 25 Verification On

* * ChinaPost 25 Verification Off

**4. Check digit output setting**

The user can read the following setting code to set the MSI ChinaPost 25 check digit output.

ChinaPost 25 Check Bit Output

* * ChinaPost 25 Check Bit Not Output

## 8.3 Two-dimensional barcode operation

### 8.3.1 QR Code

**1.QR Code reading permission and prohibition**

The user can read the following setting codes to enable and disable the QR Code reading function.

* * Allow QR Read

Disable QR Read

**2. QR Mode 1 Read On and Off**

The user can turn on or off the QR mode 1 read support by reading the following setting code.

QR Mode 1-On

* * QR Mode 1-Off

**3. QR plus prefix (11) on and off**

The user can turn on or off the QR prefix (11) function by reading the following setting code.

QR Plus Prefix (11)-On

* * QR Plus Prefix (11)-Off

### 8.3.2 Data Matrix （DM）

The user can read the following setting codes to enable and disable the Data Matrix reading function.

* * Allow DM Read

Disable DM Read

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

Allow multiple DM functions to be read simultaneously

* * Disable multiple DM functions to be read simultaneously

### 8.3.3 PDF417

The user can read the following setting codes to enable and disable the PDF417 reading function.

* * Allow PDF 417 to read

Disable PDF 417 to read

### 8.3.4 Micro QR

The user can read the following setting codes to enable and disable the Micro QR reading function.

* * Allow Micro QR Read

Disable Micro QR Read

### 8.3.5 Han Xin Code

The user can read the following setting codes to allow and prohibit the Chinese code reading function.

Allow Chinese code reading

* * Forbid Chinese code reading

### 8.3.6 Micro PDF 417

The user can read the following setting codes to enable and disable the Micro PDF 417 reading function.

* * Allow Micro PDF 417 to read

Disable Micro PDF 417 to read

### 8.3.7 Code 16K

**1. Permission and prohibition of reading function**

The user can read the following setting codes to enable and disable the Code 16K reading function.

Allow Code 16K reading

* * Disable Code 16K reading

**2. Read length setting**

Code 16K message minimum length is 0

* * Code 16K message minimum length is 4

* * The maximum length of Code 16K information is 32.

The maximum length of Code 16K information is 255.

## 8.3.8 Code 49

**1. Permission and prohibition of reading function**

The user can read the following setting codes to enable and disable the Code 49 reading function.

Allow to read Code 49

* * Disable to read Code 49

**2. Read length setting**

Code 49 Message Minimum Length 0

* * Code 49 Message Minimum Length 4

* * The maximum length of Code 49 information is 32.

The maximum length of Code 49 information is 255.

### 8.3.9 Maxi Code

The user can read the following setting codes to enable and disable the Maxi Code reading function.

Allow Maxi Code Reading

* * Disable Maxi Code Reading

### 8.3.10 Aztec

The user can read the following setting codes to enable and disable the Aztec reading function.

Allow Aztec to read

* * Disable Aztec to read

### 8.3.11 GS1 Composite

The user can read the following setting codes to enable and disable the GS1 Composite reading function.

Allow to read GS1 Composite

* * Disable to read GS1 Composite

# Chapter 9 Save and Cancel

## 9.1 Preservation

After reading the "data code", it is necessary to read the "save" setting code to save the data.

Preservation

## 9.2 Cancellation

When an error occurs in the read data, the following setting codes can be read to cancel the current setting, cancel the previous read one-bit data, and cancel the previous read one-string data.

Cancels one bit of data previously read

Cancels one string of data previously read

Cancel the current setting

Note: To cancel the current setting, you need to cancel all the data codes read before, and you need to reset them after canceling.

# Appendix

## Appendix A: Data Code

**0 ～ 9**

0

1

2

3

4

5

6

7

8

9

**A ～ F**

A

B

C

D

E

F

## Appendix B: Examples of Parameter Settings

- Example 1: Modify the prefix custom to DATA

1. Query the character table to obtain the hexadecimal values corresponding to the four characters of "DATA": "44", "41", "54" and "41"

2. Read the "Open setting code"; (if it is enabled, this step can be skipped)

3. Read the "modify prefix" setting code

4. Read data code "4", "4", "1" and "5" in turn.

5. Read "Save" setting code

◆ Example 2: Modify the Suffix Custom to DATA

1. Query the character table to obtain the hexadecimal values corresponding to the four characters of "DATA": "44", "41", "54" and "41"

2. Read the "Open setting code"; (if it is enabled, this step can be skipped)

3. Read the "modify suffix" setting code

4. Read data code "4", "4", "1" and "5" in turn.

5. Read "Save" setting code

◆ Example 3: Modify the CODE ID of EAN13 to "A"

1. Query the character table to obtain the hexadecimal value corresponding to the "A" character: "41"

2. Read the "Open setting code"; (if it is enabled, this step can be skipped)

3. Read and modify the CODE ID "setting code of EAN13

4. Read data code "4" and "1" in turn

5. Read "Save" setting code

◆ Example 4:

[Transfer Start Segment Only] When the decoding information is "1234567890ABC", the first 10 bytes "1234567890" are output.

1. Query the character table to obtain the hexadecimal value corresponding to the "10" character: "0A"

2. Read the "Open setting code"; (if it is enabled, this step can be skipped)

3. Read the setting code of "Modify Start Section Length"

4. Read data code "0" and "A" in turn

5. Read "Save" setting code

6. Read the "Transmit Start Segment Only" setting code

◆ Example 5:

[Transfer End segment only] When the decoding information is "1234567890ABC", the first 10 bytes "1234567890" are output.

1. Query the character table to obtain the hexadecimal value corresponding to the "10" character: "0A"

2. Read the "Open setting code"; (if it is enabled, this step can be skipped)

3. Read the setting code of "Modify End Section Length"

4. Read data code "0" and "A" in turn

5. Read "Save" setting code

6. Read "Transmit End Segment Only" setting code

◆ Example 6:

[Transfer Center segment only] When the decoding information is "1234567890ABC1234567890", the middle 3 bytes "ABC" are output.

1. Query the character table to obtain the hexadecimal value corresponding to the "10" character: "0A"

2. Read the "Open setting code"; (if it is enabled, this step can be skipped)

3. Read the setting code of "Modify End Section Length"

4. Read data code "0" and "A" in turn

5. Read "Save" setting code

6. Read the setting code of "Modify Start Section Length"

7. Read data code "0" and "A" in turn

8. Read "Save" setting code

9. Read Transmit Center Segment Only setting code

- Example 7: Modify RF information to "FAIL"

1. Query the character table to obtain the hexadecimal value corresponding to the "FAIL" character: "46" 41 "49" 4C "

2. Read the "Open setting code"; (if it is enabled, this step can be skipped)

3. Read the setting code of "modify RF information"

4. Read the data code "4", "6", "4", "1," 4, "9," 4 and "C" in turn

5. Read "Save" setting code

- Example 8: Modify the GS substitution character to "D"

1. Query the character table to obtain the hexadecimal value corresponding to the "D" character: "44"

2. Read the "Open setting code"; (if it is enabled, this step can be skipped)

3. Read the "GS character replacement enable" setting code (if it is enabled, this step can be skipped)

4. Read the setting code of "GS substitution character modification"

5. Read data code "4" and "4" in turn

6. Read "Save" setting code

## Appendix C: Default Settings Table

| Parameter name | | Default settings | Remark |
|---|---|---|---|
| **Setting code** | | | |
| Set the code function | | Open | |
| **Communication settings** | | | |
| Communication mode | | USB-HID | |
| TTL-232 | Serial port baud rate | 9600bps | |
| | Serial port check bit | No check digit | |
| | Serial port data bit | 8 bits | |
| | Serial port stop bit | 1 bit | |
| | Hardware flow control | None | |
| USB-HID | USB-HID Device Selection | USB-KBW | |
| | PC access period to HID device | 1ms | Range: 1 ~ 64 ms |
| | HID pre-release interval | 1ms | Range: 1 to 63 ms |
| | Interval after HID release | 1ms | Range: 1 to 63 ms |
| | CapsLock status | Off | |
| | HID leading key output | Disable | |
| **Scan code mode parameters** | | | |
| Default reading mode: | | **Manual mode** | |
| Manual mode | Trigger mode | Level trigger | |
| | Duration of single code reading | 5000ms | Range: 100ms ~ 25500ms,<br>Step size 100ms,<br>0 for infinite length |
| | Deep sleep | Close | Sleep duration: 0-3276700ms<br>Step length: 100ms |

| | | | |
|---|---|---|---|
| Command trigger mode | Trigger condition | Command trigger | 7E 00 08 01 00 02 01 AB CD |
| | Trigger a command response | Permission | |
| | Duration of single code reading | 5000ms | Range: 100ms ~ 25 500ms<br>Step size 100ms<br>0 x00: infinitely long |
| Continuous mode | Reading interval | 1000ms | Range: 0 ~ 25 500ms<br>Step size 100ms |
| | Same code reading delay | No delay | Delay time range: 100ms ~ 25500ms<br>Step size 100ms<br>0 x00: infinite delay |
| | Duration of single code reading | 5000ms | Range: 100ms ~ 25 500ms<br>Step size 100ms<br>0 x00: infinitely long |
| | Continuous Mode Key Pause Switch | Support | |
| Induction mode | Duration of single code reading | 5000ms | Range: 100 ~ 25 500ms<br>Step size 100ms<br>0 x00: infinitely long |
| | Length of reading interval | 1000ms | Range: 0 ~ 25 500ms<br>Step size 100ms |
| | Same code reading delay | No delay | Delay time range: 100ms ~ 25500ms<br>Step size 100ms<br>0 x00: infinite delay |
| | Sensitivity | Normal sensitivity | Sensitivity parameter 1/2: 00-FF<br>The higher the parameter, the lower the sensitivity |
| | Duration of image stabilization | 0ms | Range: 0 ~ 25 500ms<br>Step size 100ms |

| **General settings** | | | |
|---|---|---|---|
| Fill light/positioning | Locating light | Light up when taking pictures | |
| | Fill light | Light up when taking pictures | |
| Buzzer | Buzzer setting | Passive buzzer | |
| | Passive buzzer | Intermediate frequency | |
| | Active buzzer | High level | Active high during operation, active low during idle |
| | Mute | Close | |
| Power on tone | | Open | |
| Read the prompt sound of success | | Open | |
| Duration of recognition success prompt tone | | 60ms | Range 0-255 ms |
| Reading success LED prompt | | Open | |
| Set the prompt tone for code recognition | | Open | |
| Output data format | | GBK | |
| Keyboard | | America | |
| Virtual/standard keyboard | | Standard | |
| Control character output | | Close | The virtual keyboard is off by default, Default control character off mode after on |
| Image mirror flip | | Prohibition | |
| Serial port simulating HID protocol | | Disable | |
| Invoicing mode | | Enable/Local Billing Mode | |
| **Data editing** | | | |
| Prefix | | Do not add | |
| Suffix | | Do not add | |
| CODE ID | | Do not add | |

| | | |
|---|---|---|
| AIM ID | Do not add | |
| Terminator | CR（0x0D） | |
| Data segment interception | Transfers the entire Data segment | |
| RF information | Do not send | |
| Output protocol | Data only output | |
| GS character substitution | Prohibition | |
| Web site code reading | Permission | |
| **Code system setting** | | |
| Reverse phase | Prohibition | |
| Image mirror flip | Prohibition | |
| Commodity code check output | Enable | EAN13/EAN8/UPC-A/UPC-E0/UPC-E1 |
| Reading ability is strengthened | Prohibition | |
| **EAN-13** | | |
| Read | Permission | |
| Forcibly output additional code | Not required | |
| 2-digit additional code | Prohibition | |
| 5-digit additional code | Prohibition | |
| Check digit output | Output | |
| **EAN-8** | | |
| Read | Permission | |
| Forcibly output additional code | Not required | |
| 2-digit additional code | Prohibition | |
| 5-digit additional code | Prohibition | |
| Check digit output | Output | |
| **UPC-A** | | |
| Read | Permission | |
| Forcibly output additional code | Not required | |
| 2-digit additional code | Prohibition | |

| | | |
|---|---|---|
| 5-digit additional code | Prohibition | |
| UPC-A to EAN13 | Prohibition | |
| Check digit output | Output | |
| **UPC-E0** | | |
| Read | Permission | |
| Forcibly output additional code | Not required | |
| 2-digit additional code | Prohibition | |
| 5-digit additional code | Prohibition | |
| Check digit output | Output | |
| **UPC-E1** | | |
| Read | Permission | |
| Forcibly output additional code | Not required | |
| 2-digit additional code | Prohibition | |
| 5-digit additional code | Prohibition | |
| Check digit output | Output | |
| **Code128** | | |
| Read | Permission | |
| Minimum message length | 0 | |
| Maximum message length | 255 | |
| Add Prefix (11) Function | Close | |
| **Code 39** | | |
| Read | Permission | |
| Minimum message length | 0 | |
| Maximum message length | 255 | |
| Start character | No output | |
| Terminator | No output | |
| Code32 | Not enabled | |
| Code32 prefix output | Output | Premise: Code32 enabled |
| FullAsc mode | Not enabled | |

| | | |
|---|---|---|
| Process the check | Do not process | |
| Check digit output | No output | |
| **Code 93** | | |
| Read | Permission | |
| Minimum message length | 0 | |
| Maximum message length | 255 | |
| **CodaBar** | | |
| Read | Permission | |
| Minimum message length | 0 | |
| Maximum message length | 255 | |
| Start and stop characters | No output | |
| **Interleaved 2 of 5** | | |
| Read | Prohibition | |
| Minimum message length | 4 | |
| Maximum message length | 32 | |
| Check format | None | |
| Check digit output | No output | |
| **Industrial 25** | | |
| Read | Prohibition | |
| Minimum message length | 4 | |
| Maximum message length | 32 | |
| Check format | None | |
| Check digit output | No output | |
| **Matrix 2 of 5** | | |
| Read | Prohibition | |
| Minimum message length | 4 | |
| Maximum message length | 32 | |
| Check format | None | |
| Check digit output | No output | |

| | | |
|---|---|---|
| **Code11** | | |
| Read | Prohibition | |
| Minimum message length | 4 | |
| Maximum message length | 32 | |
| Verification mode | 1bit | |
| Check digit output | No output | |
| **MSI Plessey** | | |
| Read | Prohibition | |
| Minimum message length | 4 | |
| Maximum message length | 32 | |
| Verification mode | Single Mod10 | |
| Check digit output | No output | |
| **RSS-14** | | |
| Read | Prohibition | |
| Is AI bracketed | Bracketed | |
| **Qualified RSS** | | |
| Read | Prohibition | |
| Is AI bracketed | Bracketed | |
| **Extended RSS** | | |
| Read | Prohibition | |
| Minimum message length | 4 | |
| Maximum message length | 32 | |
| Is AI bracketed | Bracketed | |
| **Standard 2 of 5** | | |
| Read | Prohibition | |
| Minimum message length | 4 | |
| Maximum message length | 32 | |
| Check | Close | |
| Check digit output | No output | |

| | | |
|---|---|---|
| **Plessey** | | |
| Read | Prohibition | |
| Minimum message length | 4 | |
| Maximum message length | 32 | |
| Check | Close | |
| Check digit output | No output | |
| **ChinaPost 25** | | |
| Read | Prohibition | |
| Minimum message length | 4 | |
| Maximum message length | 32 | |
| Check | Close | |
| Check digit output | No output | |
| **QR Code** | | |
| Read | Permission | |
| Mode 1 reading | Close | |
| Add Prefix (11) | Close | |
| **PDF417** | | |
| Read | Permission | |
| **Data Matrix** | | |
| Read | Permission | |
| Read multiple DM barcodes at the same time | Prohibition | |
| **Micro QR** | | |
| Read | Permission | |
| **Han Xin Code** | | |
| Read | Prohibition | |
| **Micro PDF417** | | |
| Read | Permission | |
| **Code 16K** | | |
| Read | Prohibition | |

| | | |
|---|---|---|
| **Maxi Code** | | |
| Read | Prohibition | |
| **Aztec** | | |
| Read | Prohibition | |

## Appendix D: Common Serial Command

| Function | Serial port command | Return instruction |
|---|---|---|
| Switch to manual mode (The positioning light and fill light are on when taking photos) | 7E 00 08 01 00 00 D4 FF 60 | 02 00 00 01 00 33 31 |
| Toggle Command Trigger Mode (The positioning light and fill light are on when taking photos) | 7E 00 08 01 00 00 D5 EF 41 | 02 00 00 01 00 33 31 |
| Switch to continuous mode (The positioning light and fill light are on when taking photos) | 7E 00 08 01 00 00 D6 DF 22 | 02 00 00 01 00 33 31 |
| Switch the sensing mode (The positioning light and fill light are on when taking photos) | 7E 00 08 01 00 00 D7 CF 03 | 02 00 00 01 00 33 31 |
| Command Trigger Mode Trigger Command | 7E 00 08 01 00 02 01 02 DA | 02 00 00 01 00 33 31 |
| Trigger Command Acknowledge Allow | 7E 00 08 01 00 01 04 07 2C | 02 00 00 01 00 33 31 |
| Trigger Command Response Inhibit | 7E 00 08 01 00 01 84 96 A4 | 02 00 00 01 00 33 31 |
| Set the reading interval of 5S | 7E 00 08 01 00 05 32 9D 7D | 02 00 00 01 00 33 31 |
| Set the duration of single code reading as 10 s | 7E 00 08 01 00 06 64 F2 1D | 02 00 00 01 00 33 31 |
| Set the baud rate (115200 bps) | 7E 00 08 02 00 2A 1A 00 E4 7E | 02 00 00 01 00 33 31 |

| | | |
|---|---|---|
| Save settings to internal Flash | 7E 00 09 01 00 00 00 DE C8 | 02 00 00 01 00 33 31 |
| Query baud rate (115200 bps) | 7E 00 07 01 00 2A 02 D8 0F | 02 00 00 02 1A 00 82 D8 |
| Restore factory settings | 7E 00 09 01 00 00 FF C0 38 | 02 00 00 01 00 33 31 |
| Set Terminator (CRLF) | 7E 00 08 01 00 60 21 4B F0 | 02 00 00 01 00 33 31 |
| Current settings are saved as user factory settings | 7E 00 08 01 00 D9 56 E1 15 | 02 00 00 01 00 33 31 |
| Restore user custom factory settings | 7E 00 08 01 00 D9 55 D1 76 | 02 00 00 01 00 33 31 |

## Appendix E: Code ID List

| Barcode type | Corresponding character | Flag bit address |
|---|---|---|
| EAN-13 | d | 0x91 |
| EAN-8 | d | 0x92 |
| UPC-A | c | 0x93 |
| UPC-E0 | c | 0x94 |
| UPC-E1 | c | 0x95 |
| Code 128 | j | 0x96 |
| Code 39 | b | 0x97 |
| Code 93 | i | 0x98 |
| Codabar | a | 0x99 |
| Interleaved 2 of 5 | e | 0x9A |
| Industrial 2 of 5 | D | 0x9B |
| Matrix 2 of 5 | v | 0x9C |

| | | |
|---|---|---|
| Code 11 | H | 0x9D |
| MSI Plessey | m | 0x9E |
| GS1 Databar(RSS-14) | R | 0x9F |
| GS1 Databar(RSS-Limited) | R | 0xA0 |
| GS1 Databar(RSS-Expanded) | R | 0xA1 |
| QR Code | Q | 0xA2 |
| Data Matrix | u | 0xA3 |
| PDF 417 | r | 0xA4 |
| Micro QR | X | 0xA5 |
| Han Xin Code | h | 0xA6 |
| Micro PDF417 | R | 0xA7 |
| Standard 2 of 5 | f | 0xA8 |
| Plessey | n | 0xA9 |
| ChinaPost 25 | X | 0xAA |
| Code 16K | X | 0xAB |
| Code 49 | X | 0xAC |
| Maxi Code | x | 0xAD |
| Aztec | z | 0xAE |

## Appendix F: ASCII Code Table

| Hexadecimal | Decimal system | Character |
|---|---|---|
| 00 | 0 | NUL (Null char.) |
| 01 | 1 | SOH (Start of Header) |
| 02 | 2 | STX (Start of Text) |
| 03 | 3 | ETX (End of Text) |
| 04 | 4 | EOT (End of Transmission) |
| 05 | 5 | ENQ (Enquiry) |
| 06 | 6 | ACK (Acknowledgment) |
| 07 | 7 | BEL (Bell) |
| 08 | 8 | BS (Backspace) |
| 09 | 9 | HT (Horizontal Tab) |
| 0a | 10 | LF (Line Feed) |
| 0b | 11 | VT (Vertical Tab) |
| 0c | 12 | FF (Form Feed) |
| 0d | 13 | CR (Carriage Return) |
| 0e | 14 | SO (Shift Out) |
| 0f | 15 | SI (Shift In) |
| 10 | 16 | DLE (Data Link Escape) |
| 11 | 17 | DC1 (XON) (Device Control 1) |
| 12 | 18 | DC2 (Device Control 2) |
| 13 | 19 | DC3 (XOFF) (Device Control 3) |
| 14 | 20 | DC4 (Device Control 4) |
| 15 | 21 | NAK (Negative Acknowledgment) |
| 16 | 22 | SYN (Synchronous Idle) |
| 17 | 23 | ETB (End of Trans. Block) |
| 18 | 24 | CAN (Cancel) |

| | | |
|---|---|---|
| 19 | 25 | EM (End of Medium) |
| 1a | 26 | SUB (Substitute) |
| 1b | 27 | ESC (Escape) |
| 1c | 28 | FS (File Separator) |
| 1d | 29 | GS (Group Separator) |
| 1e | 30 | RS (Request to Send) |
| 1f | 31 | US (Unit Separator) |
| 20 | 32 | SP (Space) |
| 21 | 33 | ! (Exclamation Mark) |
| 22 | 34 | " (Double Quote) |
| 23 | 35 | # (Number Sign) |
| 24 | 36 | $ (Dollar Sign) |
| 25 | 37 | % (Percent) |
| 26 | 38 | & (Ampersand) |
| 27 | 39 | ` (Single Quote) |
| 28 | 40 | ( (Right / Closing Parenthesis) |
| 29 | 41 | ) (Right / Closing Parenthesis) |
| 2a | 42 | * (Asterisk) |
| 2b | 43 | + (Plus) |
| 2c | 44 | , (Comma) |
| 2d | 45 | - (Minus / Dash) |
| 2e | 46 | . (Dot) |
| 2f | 47 | / (Forward Slash) |
| 30 | 48 | 0 |
| 31 | 49 | 1 |
| 32 | 50 | 2 |
| 33 | 51 | 3 |
| 34 | 52 | 4 |

| | | |
|---|---|---|
| 35 | 53 | 5 |
| 36 | 54 | 6 |
| 37 | 55 | 7 |
| 38 | 56 | 8 |
| 39 | 57 | 9 |
| 3a | 58 | : (Colon) |
| 3b | 59 | ; (Semi-colon) |
| 3c | 60 | < (Less Than) |
| 3d | 61 | = (Equal Sign) |
| 3e | 62 | > (Greater Than) |
| 3f | 63 | ? (Question Mark) |
| 40 | 64 | @ (AT Symbol) |
| 41 | 65 | A |
| 42 | 66 | B |
| 43 | 67 | C |
| 44 | 68 | D |
| 45 | 69 | E |
| 46 | 70 | F |
| 47 | 71 | G |
| 48 | 72 | H |
| 49 | 73 | I |
| 4a | 74 | J |
| 4b | 75 | K |
| 4c | 76 | L |
| 4d | 77 | M |
| 4e | 78 | N |
| 4f | 79 | O |
| 50 | 80 | P |

| | | |
|---|---|---|
| 51 | 81 | Q |
| 52 | 82 | R |
| 53 | 83 | S |
| 54 | 84 | T |
| 55 | 85 | U |
| 56 | 86 | V |
| 57 | 87 | W |
| 58 | 88 | X |
| 59 | 89 | Y |
| 5a | 90 | Z |
| 5b | 91 | [ (Left / Opening Bracket) |
| 5c | 92 | \ (Back Slash) |
| 5d | 93 | ] (Right / Closing Bracket) |
| 5e | 94 | ^ (Caret / Circumflex) |
| 5f | 95 | _ (Underscore) |
| 60 | 96 | ' (Grave Accent) |
| 61 | 97 | a |
| 62 | 98 | b |
| 63 | 99 | c |
| 64 | 100 | d |
| 65 | 101 | e |
| 66 | 102 | f |
| 67 | 103 | g |
| 68 | 104 | h |
| 69 | 105 | i |
| 6a | 106 | j |
| 6b | 107 | k |
| 6c | 108 | l |

| | | |
|---|---|---|
| 6d | 109 | m |
| 6e | 110 | n |
| 6f | 111 | o |
| 70 | 112 | p |
| 71 | 113 | q |
| 72 | 114 | r |
| 73 | 115 | s |
| 74 | 116 | t |
| 75 | 117 | u |
| 76 | 118 | v |
| 77 | 119 | w |
| 78 | 120 | x |
| 79 | 121 | y |
| 7a | 122 | z |
| 7b | 123 | { (Left/ Opening Brace) |
| 7c | 124 | \| (Vertical Bar) |
| 7d | 125 | } (Right/Closing Brace) |
| 7e | 126 | ~ (Tilde) |
| 7f | 127 | DEL (Delete) |

## Appendix G: List of Batch Setup Code Parameters

| Set the code function | Set the code parameter content | Remark |
|---|---|---|
| Open the setting code | 00000000 | If the setting code is off, you need to turn on the setting code first |

| | | |
|---|---|---|
| TTL-232 serial port mode | 01000000 | |
| USB-HID Mode | 01000001 | |
| USB-232 Virtual Serial Port Mode | 01000002 | |
| HID & TTL Simultaneous Output Mode | 01000003 | |
| HID-KBW | 01010000 | |
| HID-POS | 01010001 | |
| 1200bps | 010209C4 | |
| 4800bps | 01020271 | |
| 9600bps | 01020139 | |
| 14400bps | 010200D0 | |
| 19200bps | 0102009C | |
| 38400bps | 0102004E | |
| 57600bps | 01020034 | |
| 115200bps | 0102001A | |
| No Checksum (NONE) | 01030000 | |
| Odd parity (ODD) | 01030001 | |
| Even parity (EVEN) | 01030002 | |
| PC access cycle to HID device-1ms | 01040001 | The last two digits of the parameter can be modified for other durations. |
| PC access cycle to HID device-3ms | 01040003 | |
| PC access cycle to HID device-5ms | 01040005 | The last two digits of the parameter can be modified for other durations. |
| PC access cycle to HID device-10ms | 0104000A | |
| Time interval before HID release-1ms | 01050001 | For other durations, the last two digits of the parameter can be modified. |
| Time interval before HID release-2ms | 01050002 | |
| Time interval before HID release-5ms | 01050005 | |
| Time interval before HID release-10ms | 0105000A | |
| Time interval after HID release-1ms | 01060001 | For other durations, the last two digits of the parameter can be modified. |
| Time interval after HID release-2ms | 01060002 | |
| Time interval after HID release-5ms | 01060005 | |

| | | |
|---|---|---|
| Time interval after HID release-10ms | 0106000A | |
| CapsLock-Off | 01070000 | |
| CapsLock-On | 01070001 | |
| HID leading inhibit | 01080000 | |
| HID leading allowed | 01080001 | |
| Manual mode | 02000000 | |
| Level trigger | 02010000 | |
| Edge trigger | 02010001 | |
| Duration of single code reading-1000ms | 0202000A | For other durations, the last two digits of the parameter can be modified. |
| Duration of single code reading-3000ms | 0202001E | |
| Duration of single code reading-5000ms | 02020032 | |
| Duration of single code reading-10000ms | 02020064 | |
| Duration of single code reading-infinite | 02020000 | |
| Command trigger mode | 02000001 | |
| Continuous mode | 02000002 | |
| Trigger Command Acknowledge Allow | 020A0001 | |
| Trigger Command Response Inhibit | 020A0000 | |
| Continuous mode key pause is not supported | 020A0010 | |
| Continuous Mode Key Pause Support | 020A0011 | |
| Read Interval-No Interval | 02050000 | For other durations, the last two digits of the parameter can be modified. |
| Reading interval-500ms | 02050005 | |
| Reading interval-1000ms | 0205000A | |
| Reading interval-3000ms | 0205001E | |
| Reading interval-5000ms | 02050032 | |
| Same code reading delay closing | 02060000 | For the setting of duration parameter, the same code reading delay must be started first |
| Same code reading delay on | 02060001 | |
| Same code reading delay time-infinite delay | 02070000 | |

| | | |
|---|---|---|
| Same code reading delay time: -500ms | 02070005 | For other durations, the last two digits of the parameter can be modified. |
| Same code reading delay time: -1000ms | 0207000A | |
| Same code reading delay time: -3000ms | 0207001E | |
| Same code reading delay time: -5000ms | 02070032 | |
| Induction mode | 02000003 | |
| Normal sensitivity | 0209640A | |
| Low sensitivity | 020932A0 | |
| High sensitivity | 0209320A | |
| Very high sensitivity | 02093205 | |
| Image stabilization duration -0ms | 02080000 | For other durations, the last two digits of the parameter can be modified. |
| Image stabilization time-100ms | 02080001 | |
| Image stabilization duration-400ms | 02080004 | |
| Image stabilization time-1000ms | 0208000A | |
| Image stabilization time-2000ms | 02080014 | |
| The fill light is lit when taking a picture. | 03000000 | |
| Fill light-normally on | 03000001 | |
| Fill light-normally off | 03000002 | |
| Locator Light-Illuminated when taking pictures | 03010000 | |
| Positioning light-always on when taking pictures | 03010003 | |
| Locating light-normally on | 03010001 | |
| Locating lamp-normally off | 03010002 | |
| Deep sleep function on | 02030000 | |
| Deep sleep function is off | 02030001 | |
| Mute-On | 04000000 | |
| Mute-Off | 04000001 | |
| Passive buzzer settings | 04010005 | |
| Passive-low frequency | 04010000 | |
| Passive-if | 04010001 | |

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|---|---|---|
| Passive-HF | 04010002 | |
| Active buzzer setting | 04010006 | |
| Active Operating Level-High | 04010003 | |
| Active Operating Level-Low | 04010004 | |
| Set Tone-On | 04020000 | |
| Set Tone-Off | 04020001 | |
| Power On Tone-On | 04030000 | |
| Power On Tone-Off | 04030001 | |
| Reading success LED prompt-ON | 04040000 | |
| Reading Success LED Prompt-Off | 04040001 | |
| Read Success Tone-On | 04040002 | |
| Recognize successful prompt tone-off | 04040003 | |
| Duration of successful reading prompt tone: -30ms | 0404011E | For other durations, the last two digits of the parameter can be modified. |
| Duration of successful reading prompt tone-60ms | 0404013C | |
| Duration of successful reading prompt tone: -90ms | 0404015A | |
| Duration of successful reading prompt tone-120ms | 04040178 | |
| Output Data Format-GBK | 04050000 | |
| Output Data Format-UTF8 | 04050001 | |
| Output Data Format-Raw Data | 04050002 | |
| Output Data Format-UNICODE | 04050003 | |
| Output data shield Chinese | 04050100 | |
| Output data is not shielded in Chinese | 04050101 | |
| Base64 decoding is off | 04050200 | |
| Base64 decoding is on | 04050201 | |
| American keyboard | 04060000 | |
| Czech keyboard | 04060001 | |
| French keyboard | 04060002 | |
| German keyboard | 04060003 | |

| | | |
|---|---|---|
| Hungarian keyboard | 04060004 | |
| Italian keyboard | 04060005 | |
| Japanese keyboard | 04060006 | |
| Spanish keyboard | 04060007 | |
| Turkish Q keyboard | 04060008 | |
| Turkish F keyboard | 04060009 | |
| Mexican Keyboard (Latin) | 0406000A | |
| Standard Keyboard | 04070000 | |
| Virtual keyboard | 04070001 | |
| Virtual Keyboard Ctrl Mode | 04070010 | |
| Virtual Keyboard _ Alt Mode | 04070011 | |
| Control character output off | 04070012 | |
| Image Mirror Flip-On | 04080000 | |
| Image Mirror Flip-Off | 04080001 | |
| Reverse phase inhibit | 04090000 | |
| Inversion is allowed | 04090001 | |
| Invoicing mode enabled | 040B0000 | |
| Invoicing mode disabled | 040B0001 | |
| Local billing mode | 040B1000 | |
| Online invoicing mode | 040B1100 | |
| Keypad numeric output on | 040C0000 | |
| Keypad numeric output off | 040C0001 | |
| Keypad Operator Output On | 040C0002 | |
| Keypad Operator Output Off | 040C0003 | |
| Allow prefixes to be added | 05000000 | |
| Prefix addition is prohibited | 05000001 | |
| Modify the prefix | 05000002 | |
| Suffixes are allowed | 05010000 | |

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|---|---|---|
| Adding a suffix is prohibited | 05010001 | |
| Modify the suffix | 05010002 | |
| Allow CODE ID addition | 05020000 | |
| Disable adding CODE ID | 05020001 | |
| Restore CODE ID default | 05020002 | |
| Modifying the CODE ID of EAN13 | 05030000 | |
| Modifying the CODE ID of EAN8 | 05030001 | |
| Modifying the CODE ID of UPC-A | 05030002 | |
| Modify the CODE ID of UPCE0 | 05030003 | |
| Modify the CODE ID of UPCE1 | 05030004 | |
| Modifying the CODE ID of CODE 128 | 05030005 | |
| Modifying the CODE ID of CODE39 | 05030006 | |
| Modifying the CODE ID of CODE93 | 05030007 | |
| Modify the CODE ID of CodaBar | 05030008 | |
| Modifying the CODE ID of Interleaved 2 of 5 | 05030009 | |
| Modifying the CODE ID of Industrial 25 | 0503000A | |
| Modifying the CODE ID of Matrix 2 of 5 | 0503000B | |
| Modify CODE ID for CODE 11 | 0503000C | |
| Modify the CODE ID of MSI Plessey | 0503000D | |
| Modify the CODE ID of RSS | 0503000E | |
| Modify the CODE ID of a qualified RSS | 05030010 | |
| Modifying the CODE ID of Extended RSS | 05030011 | |
| Modifying the CODE ID of a QR CODE | 05030012 | |
| Modifying the CODE ID of a DataMatrix | 05030013 | |
| Modify the CODE ID of the qualified PDF 417 | 05030014 | |
| Modifying the CODE ID of a Micro QR | 05030015 | |
| Modify the CODE ID of Han Xin Code | 05030016 | |
| Modifying the CODE ID of Micro PDF 417 | 05030017 | |

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|---|---|---|
| Modify Standard 2 of 5 Code ID | 05030018 | |
| Modify Plessey's CODE ID | 05030019 | |
| Modify the CODE ID of ChinaPost 25 | 0503001A | |
| Modify the CODE ID of Code 16K | 0503001B | |
| Modifying the CODE ID of Code 49 | 0503001C | |
| Modify the CODE ID of the Maxi Code | 0503001D | |
| Modify the CODE ID of Aztec | 0503001E | |
| Modifying the CODE ID of a GS1 Composite | 0503001F | |
| Closes the terminator | 05040000 | |
| Add terminator CR | 05040001 | |
| Add terminator TAB | 05040002 | |
| Add terminator CRLF | 05040003 | |
| Transfer the entire Data | 05050000 | |
| Transmit Start segment only | 05050001 | |
| Transmit End segment only | 05050002 | |
| Transfer only Center | 05050003 | |
| Modify Start Segment Length | 05050004 | |
| Modify End Segment Length | 05050005 | |
| Allow RF information to be sent | 05060000 | |
| Prohibit sending RF information | 05060001 | |
| Modify the RF information | 05060002 | |
| Data only output | 05070000 | |
| With protocol output | 05070001 | |
| GS replacement on | 050A0000 | |
| GS replacement off | 050A0001 | |
| GS Replacement Information Modification | 050A0002 | |
| Allow to read the web address code | 050B0000 | |
| It is forbidden to read the web address code | 050B0001 | |

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|---|---|---|
| * * Forbidden (AIM prefix is not added to the decoded message) | 050C0001 | |
| Enable (add AIM prefix character to decode message) | 050C0000 | |
| * * CodeID + AIM + Custom | 050D0000 | |
| AIM + CodeID + Custom | 050D0001 | |
| AIM + Custom + CodeID | 050D0002 | |
| CodeID + Custom + AIM | 050D0003 | |
| Custom + CodeID + AIM | 050D0004 | |
| Custom + AIM + CodeID | 050D0005 | |
| Fast POS mode | 06000000 | |
| Serial port & full code open mode | 06000001 | |
| Allow all types to be read | 07000000 | |
| Disable reading of all types | 07000001 | |
| Permitting the reinforcement of reading ability | 07000007 | |
| Forbidden Reading Enhancement | 07000008 | |
| Open the default reading type | 07000002 | |
| Allow sending commodity code check bit | 05090000 | |
| Prohibit sending commodity code check bit | 05090001 | |
| Enable to read EAN13 | 07010000 | |
| Reading of EAN13 is prohibited | 07010100 | |
| EAN13 forced output additional code | 07011000 | |
| EAN13 does not require additional codes to be output | 07011100 | |
| EAN13-2 Bit Extra Code Enable | 07012000 | |
| EAN13-2 Bit Additional Code Disable | 07012100 | |
| EAN13-5-bit additional code enable | 07013000 | |
| EAN13-5-bit additional code disable | 07013100 | |

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|---|---|---|
| Allow EAN13 check bit to be sent | 07014000 | |
| Prohibit sending EAN13 check bit | 07014100 | |
| Enable to read EAN8 | 07020000 | |
| Reading of EAN8 is prohibited | 07020100 | |
| EAN8 forced output additional code | 07021000 | |
| EAN8 does not require additional codes to be output | 07021100 | |
| EAN8-2-bit additional code enable | 07022000 | |
| EAN8-2-bit additional code disable | 07022100 | |
| EAN8-5-bit additional code enable | 07023000 | |
| EAN8-5-bit additional code disable | 07023100 | |
| Enable to send EAN8 check bit | 07024000 | |
| Disabling the EAN8 check bit | 07024100 | |
| Allow to read UPC-a | 07030000 | |
| Disable reading of UPC-a | 07030100 | |
| UPC-a forced output additional code | 07031000 | |
| UPC-a does not require additional codes to be output | 07031100 | |
| UPC-A-2 bit additional code enable | 07032000 | |
| UPC-A-2 bit additional code disable | 07032100 | |
| UPC-A-5 bit additional code enabled | 07033000 | |
| UPC-A-5 additional code disable | 07033100 | |
| Allow UPC-a to EAN13 | 05080000 | |
| Disable UPC-a to EAN13 | 05080001 | |
| Allow UPC-a check bit to be sent | 07034000 | |
| Prohibit sending of UPC-a check bit | 07034100 | |
| Allow to read UPC-E0 | 07040000 | |
| Reading of UPC-E0 is prohibited | 07040100 | |

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|---|---|---|
| UPC-E0 forced output additional code | 07041000 | |
| UPC-E0 does not require additional codes to be output | 07041100 | |
| UPC-E0-2-bit additional code enabled | 07042000 | |
| UPC-E0-2-bit additional code disable | 07042100 | |
| UPC-E0-5-bit additional code enabled | 07043000 | |
| UPC-E0-5 bit additional code disable | 07043100 | |
| Allow UPC-E0 check bit to be sent | 07044000 | |
| Prohibit sending of UPC-E0 check bit | 07044100 | |
| Allow to read UPC-E1 | 07050000 | |
| Disable reading of UPC-E1 | 07050100 | |
| UPC-E1 forced output additional code | 07051000 | |
| UPC-E1 does not require additional codes to be output | 07051100 | |
| UPC-E1-2 bit additional code enable | 07052000 | |
| UPC-E1-2 bit additional code disable | 07052100 | |
| UPC-E1-5 bit additional code enable | 07053000 | |
| UPC-E1-5 additional code disable | 07053100 | |
| Allow UPC-E1 check bit to be sent | 07054000 | |
| Prohibit sending UPC-E1 check bit | 07054100 | |
| Allow to read Code 128 | 07060000 | |
| Prohibit reading Code 128 | 07060100 | |
| The minimum length of Code 128 information is 0 | 07061000 | For other lengths, the last two digits of the parameter can be modified. |
| The minimum length of Code 128 information is 4 | 07061004 | |
| The maximum length of Code 128 information is 32. | 07061120 | |
| Code 128 The maximum length of information is 255 | 070611FF | |

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|---|---|---|
| Code 128 plus prefix (11)-On | 07062000 | |
| Code 128 plus prefix (11)-Off | 07062100 | |
| Allow to read Code 39 | 07070000 | |
| Prohibit reading Code 39 | 07070100 | |
| The minimum length of Code39 information is 0 | 07071000 | For other lengths, the last two digits of the parameter can be modified. |
| Code39 messages have a minimum length of 4 | 07071004 | |
| The maximum length of Code39 information is 32. | 07071120 | |
| The maximum length of Code39 information is 255. | 070711FF | |
| Code39 Starter Output | 07072000 | |
| Code39 start character is not output | 07072100 | |
| Code39 Terminator Output | 07073000 | |
| Code39 terminator is not output | 07073100 | |
| Allow to read Code32 | 07074000 | |
| Code32 reading is prohibited | 07074100 | |
| Code32 Prefix A Output | 07076000 | |
| Code32 Prefix A is not output | 07076100 | |
| FullASCII support | 07075000 | |
| FullASCII is not supported | 07075100 | |
| Code39 handles the check symbol | 07077000 | |
| Code39 does not handle checksum | 07077100 | |
| Code39 output check symbol | 07078000 | |
| Code39 does not output a check symbol | 07078100 | |
| Allow to read Code93 | 07080000 | |
| Code93 is forbidden to be read | 07080100 | |
| The minimum length of Code93 information is 0 | 07081000 | For other lengths, the last two digits of the parameter can be modified. |
| The minimum length of Code93 information is 4 | 07081004 | |
| The maximum length of Code93 information is 32. | 07081120 | |

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|---|---|---|
| The maximum length of Code93 information is 255. | 070811FF | |
| Allow to read CodaBar | 07090000 | |
| Do not read CodaBar | 07090100 | |
| The minimum length of CodaBar information is 0 | 07091000 | For other lengths, the last two digits of the parameter can be modified. |
| The minimum length of CodaBar message is 4 | 07091004 | |
| The maximum length of CodaBar information is 32 | 07091120 | |
| The maximum length of CodaBar information is 255. | 070911FF | |
| CodaBar start-stop character sending permission | 07092000 | |
| CodaBar start-stop character sending forbidden | 07092100 | |
| CodeBar does not handle validation | 07093000 | |
| CodeBar MOD 10 Check Only | 07093100 | |
| CodeBar MOD 16 check only | 07093200 | |
| CodeBar Double Check | 07093300 | |
| CodeBar outputs the checksum | 07094000 | |
| CodeBar does not output a check character | 07094100 | |
| Allow to read Inter leaved 2 of 5 | 070A0000 | |
| Interleaved 2 of 5 is disabled | 070A0100 | |
| Interleaved 2 of 5 messages have a minimum length of 0 | 070A1000 | For other lengths, the last two digits of the parameter can be modified. |
| Interleaved 2 of 5 messages have a minimum length of 4 | 070A1004 | |
| Maximum length of Interleaved 2 of 5 message is 32 | 070A1120 | |
| The maximum length of Interleaved2of5 message is 255 | 070A11FF | |
| Interleaved 2 of 5 verification format is Mod10 | 070A2000 | |

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|---|---|---|
| Interleaved 2 of 5 checksum format is None | 070A2100 | |
| Interleaved 2 of 5 Output Verifier | 070A3000 | |
| Interleaved 2 of 5 does not output a checkmark | 070A3100 | |
| Allow to read Industrial 25 | 070B0000 | |
| Prohibit reading Industrial 25 | 070B0100 | |
| Industrial 25 message has a minimum length of 0 | 070B1000 | For other lengths, the last two digits of the parameter can be modified. |
| Industrial 25 messages have a minimum length of 4 | 070B1004 | |
| Industrial 25 The maximum length of the message is 32 | 070B1120 | |
| Industrial 25 The maximum length of the message is 255 | 070B11FF | |
| Industrial 25 verification format is Mod10 | 070B2000 | |
| Industrial 25 check format is None | 070B2100 | |
| Industrial 25 Output Checker | 070B3000 | |
| Industrial 25 does not output a check symbol | 070B3100 | |
| Allow reading of Matrix 2 of 5 | 070C0000 | |
| Disable reading of Matrix 2 of 5 | 070C0100 | |
| Matrix 2 of 5 messages have a minimum length of 0 | 070C1000 | For other lengths, the last two digits of the parameter can be modified. |
| Matrix 2 of 5 messages have a minimum length of 4 | 070C1004 | |
| Matrix 2 of 5 messages have a maximum length of 32 | 070C1120 | |
| The maximum length of Matrix 2 of 5 information is 255 | 070C11FF | |
| Matrix 2 of 5 calibration format is Mod10 | 070C2000 | |
| Matrix 2 of 5 checksum format is None | 070C2100 | |
| Matrix 2 of 5 Output Verifier | 070C3000 | |

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|---|---|---|
| Matrix 2 of 5 does not output a checkmark | 070C3100 | |
| Allow to read Code 11 | 070D0000 | |
| Prohibit reading Code 11 | 070D0100 | |
| The minimum length of Code11 information is 0 | 070D1000 | For other lengths, the last two digits of the parameter can be modified. |
| The minimum length of Code11 information is 4 | 070D1004 | |
| The maximum length of Code11 information is 32. | 070D1120 | |
| The maximum length of Code11 information is 255. | 070D11FF | |
| Code 11-1bit check | 070D2000 | |
| Code 11-2bit check | 070D2100 | |
| Code11 outputs the check symbol | 070D3000 | |
| Code11 does not output a check symbol | 070D3100 | |
| Allow to read MSI Plessey | 070E0000 | |
| Disable Read MSI Plessey | 070E0100 | |
| Minimum length of MSI Plessey message is 0 | 070E1000 | For other lengths, the last two digits of the parameter can be modified. |
| Minimum length of MSI Plessey message is 4 | 070E1004 | |
| Maximum length of MSI Plessey message is 32 | 070E1120 | |
| Maximum length of MSI Plessey message is 255 | 070E11FF | |
| MSI Plessey verification format is single Mod10 | 070E2000 | |
| The MSI Plessey verification format is Dual Mod10 | 070E2100 | |
| MSI Plessey Output Checker | 070E3000 | |
| MSI Plessey does not output a check symbol | 070E3100 | |
| Allow to read RSS-14 | 070F0000 | |
| Disable reading of RSS-14 | 070F0100 | |
| RSS-14 check digit output | 070F4000 | |
| RSS-14 check digit is not output | 070F4100 | |
| RSS-14 AI output without parentheses | 070F5000 | |

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|---|---|---|
| RSS-14 AI Bracketed Output | 070F5100 | |
| Allow reading of qualified RSS | 070F1000 | |
| Disable reading of qualified RSS | 070F1100 | |
| Qualified RSS check bit output | 070F6000 | |
| The qualified RSS check bit is not output | 070F6100 | |
| Qualified RSS AI output without parentheses | 070F7000 | |
| Qualified RSS AI Parenthesized Output | 070F7100 | |
| Allows reading of RSS Extensions | 070F2000 | |
| Disable reading of RSS Extensions | 070F2100 | |
| Extended RSS check bit output | 070F8000 | |
| The extended RSS check bit is not output | 070F8100 | |
| RSS AI Extended Output Without Parentheses | 070F9000 | |
| Extended RSS AI bracketed output | 070F9100 | |
| The minimum length of RSS message is 0 | 070F3000 | For other lengths, the last two digits of the parameter can be modified. |
| The minimum length of an RSS message is 4 | 070F3004 | |
| The maximum length of the RSS message is 32 | 070F3120 | |
| The maximum length of the RSS message is 255 | 070F31FF | |
| Allows reading of Standard 2 of 5 | 07200000 | |
| Disable Reading Standard 2 of 5 | 07200100 | |
| Standard 2 of 5 messages have a minimum length of 0 | 07201100 | For other lengths, the last two digits of the parameter can be modified. |
| Standard 2 of 5 messages have a minimum length of 4 | 07201104 | |
| The maximum length of Standard 2 of 5 information is 32 | 07201120 | |
| Maximum length of Standard 2 of 5 message is 255 | 072011FF | |
| Standard 2 of 5 Verification-On | 07202000 | |
| Standard 2 of 5 Calibration-Off | 07202100 | |

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|---|---|---|
| Standard 2 of 5 Output Verifier | 07203000 | |
| Standard 2 of 5 does not output a checkmark | 07203100 | |
| Permission to read Plessey | 07210000 | |
| Plessey is forbidden to read | 07210100 | |
| The minimum length of a Plessey message is 0 | 07211100 | For other lengths, the last two digits of the parameter can be modified. |
| Plessey messages have a minimum length of 4 | 07211104 | |
| The maximum length of a Plessey message is 32 | 07211120 | |
| The maximum length of a Plessey message is 255 | 072111FF | |
| Plessey Verification-On | 07212000 | |
| Plessey Verification-Off | 07212100 | |
| Plessey output check symbol | 07213000 | |
| Plessey does not output check symbol | 07213100 | |
| Allow to read ChinaPost 25 | 07220000 | |
| Prohibit reading ChinaPost 25 | 07220100 | |
| The minimum length of ChinaPost 25 message is 0 | 07221100 | For other lengths, the last two digits of the parameter can be modified. |
| The minimum length of ChinaPost 25 message is 4 | 07221104 | |
| The maximum length of ChinaPost 25 message is 32 | 07221120 | |
| The maximum length of ChinaPost 25 message is 255 | 072211FF | |
| ChinaPost 25 Verification-On | 07222000 | |
| ChinaPost 25 Verification-Off | 07222100 | |
| ChinaPost 25 Output Validator | 07223000 | |
| ChinaPost 25 does not output a checkmark | 07223100 | |
| Allow to read Code 16K | 07230000 | |
| Prohibit reading Code 16K | 07230100 | |
| The minimum length of Code16K information is 0 | 07231100 | For other lengths, the last two digits of the parameter can be modified. |
| The minimum length of Code16K information is 4 | 07231104 | |

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|---|---|---|
| The maximum length of Code16K information is 32. | 07231120 | |
| The maximum length of Code16K information is 255. | 072311FF | |
| Allow to read Code 49 | 07240000 | |
| Prohibit reading Code 49 | 07240100 | |
| The minimum length of Code49 information is 0 | 07241100 | For other lengths, the last two digits of the parameter can be modified. |
| Code49 messages have a minimum length of 4 | 07241104 | |
| The maximum length of Code49 information is 32. | 07241120 | |
| The maximum length of Code49 information is 255. | 072411FF | |
| Allow to read QR | 07140000 | |
| QR reading is prohibited | 07140100 | |
| QR Mode 1-On | 07141000 | |
| QR Mode 1-Off | 07141100 | |
| QR plus prefix (11)-ON | 07142000 | |
| QR plus prefix (11)-off | 07142100 | |
| Allow to read DM | 07150000 | |
| Prohibit reading DM | 07150100 | |
| Allow multiple DMs to be read simultaneously | 07151000 | |
| Do not read multiple DM barcodes at the same times | 07151100 | |
| Allow to read PDF 417 | 07160000 | |
| Forbidden PDF 417 | 07160100 | |
| Allow to read Chinese-sensible code | 07170000 | |
| Forbidden to read Chinese character code | 07170100 | |
| Allow to read Micro PDF 417 | 07180000 | |
| Disable Micro PDF 417 | 07180100 | |

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|---|---|---|
| Allow to read Micro QR | 07190000 | |
| Prohibit reading Micro QR | 07190100 | |
| Allow to read Maxi Code | 071A0000 | |
| Disable reading of Maxi Code | 071A0100 | |
| Allow to read Aztec | 071B0000 | |
| Prohibit reading Aztec | 071B0100 | |
| Allow reading of GS1 Composite | 071C0000 | |
| Disable reading GS1 Composite | 071C0100 | |
| Preservation | 08000000 | |
| Cancel the previous one-bit data | 08000001 | |
| Cancel a previously read string of data | 08000002 | |
| Cancels modifying the settings | 08000003 | |
| 0 | 08010000 | |
| 1 | 08010001 | |
| 2 | 08010002 | |
| 3 | 08010003 | |
| 4 | 08010004 | |
| 5 | 08010005 | |
| 6 | 08010006 | |
| 7 | 08010007 | |
| 8 | 08010008 | |
| 9 | 08010009 | |
| A | 0801000A | |
| B | 0801000B | |
| C | 0801000C | |
| D | 0801000D | |
| E | 0801000E | |
| F | 0801000F | |

## Appendix H: List of AIM IDs

| Barcode type | AIMID | Possible AIM ID qualifying parameters (m) |
|---|---|---|
| Code128 | ]C | 0、1 |
| EAN8 | ]E4 | |
| EAN8 with Addon | ]E3 | |
| EAN13 | ]E0 | |
| EAN13 with Addon | ]E3 | |
| UPCA | ]E0 | |
| UPCA with Addon | ]E3 | |
| UPCE | ]E0 | |
| UPCE with Addon | ]E3 | |
| Code39 | ]A | 0、1、3、4、5、7 |
| Code93 | ]G0 | |
| Codabar | ]F | 0、2、4 |
| Code11 | ]H | 0、1、3 |
| RSS | ]e0 | |
| Qualified RSS | ]e0 | |
| Extended RSS | ]e0 | |
| Industrial2of5 | ]S0 | |
| Interleaved2of5 | ]I | 0、1、3 |
| Matrix2of5 | ]X0 | |
| MSI Plessey | ]M | 0、1 |
| QR Code | ]Q | 0、1、2、3 |
| PDF417 | ]L0 | |
| DataMatrix | ]d | 0、1、2、4、5 |
| China Post 25 | ]X0 | |
| Code16K | ]K0 | |

| | | |
|---|---|---|
| Plessey | ]P0 | |
| Standard2of5 | ]R0 | |
| Aztec | ]z | 0、1 |
| Chinese-sensible code | ]X0 | |
| Maxicode | ]U | 0、1 |
| MicroQR | ]Q1 | |
| MicroPDF417 | ]L0 | |