Content

Chapter 1 Operation Settings

The factory default settings of HW-1210 can meet the needs of users for direct use in most cases. You can also set the parameters through the setting code according to actual needs.

1.1 Use setting code

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

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

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. The factory default parameters and functions can be found in Appendix C.

Restore factory default

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

1.3 User default settings

In addition to restoring factory settings, users can save frequently used settings as user default settings. By reading "Save current settings as user default settings", the current device configuration can be saved as user default information for quick settings when needed.

By reading "Restore User Default Settings", the default settings saved by the user can be restored.

Save current settings as user default settings

Restore to user default settings

2.1 Communication mode selection

The factory defaults to use USB-HID mode for communication. Users can switch between the communication port output modes (TTL-232 serial port mode/virtual serial port/USB-HID mode) through scan code settings. When users need USB and serial port to output at the same time, they can select HID & TTL simultaneous output mode by reading the setting code. When switches the communication mode, users needs to wait for the device initialization to complete 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 device. VID&PID information is as follows:

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

2.1.1 Communication port output mode

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

TTL-232 Serial mode

**USB-HID mode

USB Serial mode

HID & TTL Simultaneous output mode

2.2 Serial communication interface

The serial communication interface is a common way to connect the reading module and the host

device. When using the serial communication interface, the communication parameter configuration must be completely matched between the reading module and the host device to ensure smooth communication and correct content.

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

The default serial communication parameters of the reading module are as shown in the table below. If they are inconsistent with the host device, 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 Type	None
Data Bits	8
Stop Bits	1

2.2.1 Baud Rate

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

1200bps

4800bps

**9600bps

14400bps

19200bps

38400bps

57600bps

115200bps

2.2.2 Verification method

There are 3 types of verification methods that can be selected, as follows:

** None

Odd Parity

Even Parity

Customers can ensure the accuracy of data by sending heartbeat packets at regular intervals. The specific format is as follows.

Heartbeat packet sent by the master	Module return command
7E 00 0A 01 00 00 00 30 1A	03 00 00 01 00 33 31

Note: It is recommended to send a heartbeat packet at an interval of 10S. If no correct reply is received for three consecutive times, the master controller should take corresponding measures.

2.3 USB-HID Interface related configuration

2.3.1 HID equipment selection

When the device is used as a HID device, it can be two different devices. Users can configure by reading the following setting codes.

**HID-KBW

HID-POS

HID-POS Obtain scan data

After scanning and decoding a barcode, the device will send the following input message

Data reception								
	Bit							
Byte	7	6	5	4	3	2	1	0
0	Message ID=0x02							
1	Barcode data length							
2	Fixed value 0x5d							
3	Fixed value 0x51							
4	Fixed value 0x31							
5-60	Barcode data							
61	Fixed value 0x51							
62	Fixed value 0x51							
63	0x01 (there are data packets behind)/0x0 (there are no data packets behind)							

2.3.2 PC to HID device access cycle

Read the following setting codes, you can modify the PC access cycle to the HID device, the cycle range: 1ms～64ms

**1ms

3ms

5ms

10ms

2.3.3 HID Time interval before release

Read the following setting codes to modify the time interval before HID release (ie: the time interval from valid message to release message), interval range: 1ms～63ms

**0ms

1ms

5ms

10ms

15ms

2.3.4 HID Time interval after release

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

**0ms

1ms

5ms

10ms

15ms

2.3.5 CapsLock Status setting

** 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 piece of data, which is convenient for customer software development and positioning. The key value is Ctrl+Shift+r

**HID Leading disable

HID Leading enable

2.4 USB HID-KBW

2.4.1 HID class device

When the device is used as a HID type device (if it is not a HID type device, please read the HID type device configuration code first), you can read the following configuration code and select the HID-KBW

device type mode.

**HID-KBW

2.4.2 HID-KBW simultaneous serial output

Users can scan the following configuration codes to enable the HID-KBW to output data through the serial port at the same time.

**Serial output in HID-KBW mode- disable

*Serial output in HID-KBW mode- enable

2.4.3 Chinese encoding format

In order to enable the reading module to read Chinese barcodes in various encoding formats, it can be set by reading "input data encoding format".

Input data encoding format GBK

Input data encoding format UTF8

**Input data encoding format AUTO

In order to let the host print Chinese data according to the specified encoding format, it can be set by reading "Output Data Encoding Format".

Note: GBK format can be used in Notepad, UTF-8 format can be used in WORD and input boxes of common chat tools.

2.4 USB HID-POS

2.5.1 HID-POS device class

When the device is used as a HID type device (if it is not a HID type device, please read the HID type device configuration code first), you can read the following configuration code and select the HID-POS device type mode.

HID-POS

2.5.2 Simultaneous output of HID-POS and HID-KBW

Users can scan the following setting codes to enable output data through HID-KBW at the same time as HID-POS output.

**HID-KBW output in HID-POS mode- disable

HID-KBW output in HID-POS mode- enable

Chapter 3 Reading Mode

3.1 Manual mode

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

** Manual mode

3.1.1 Triggering conditions

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

☞ Edge triggering means that the level pulse of the trigger signal is detected, that is, the reading starts, and the reading ends when the reading is successful or the single reading time condition is reached.

☞ The level trigger condition means that the level of the trigger signal needs to be maintained from the beginning of the reading to the end of the reading. When the trigger level is cancelled, the reading is successful or the reading exceeds the single reading time, the reading ends.

Edge triggering

** Level trigger

3.1.2 Single reading time

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

1000ms

3000ms

**5000ms

Infinite

3.1.3 Deep sleep

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

Deep sleep function-on

** Deep sleep function-off

☞Note 1: After entering the deep sleep mode, you can wake up by pressing a button or a serial port command to exit the sleep mode.

☞ Note 2: The deep sleep function is only valid for manual mode and TTL-232 serial port mode output.

3.2 Command trigger mode

In command trigger mode, the reading module will start shooting and reading when it receives the trigger signal command sent by the host (that is, the bit 0 of the flag bit 0x0002 is written "1"); within the limited time range of "single reading time" If the reading is successful, the reading module will output the reading content through the communication interface and stop reading. If you need to start a new reading, you need to resend the trigger command. If the reading exceeds the single reading time, the reading will be suspended.

Command trigger mode

3.2.1 Single reading time

Please refer to section 3.1.2 for the setting of single reading time length setting code.

3.3 Continuous mode

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

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

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

Continuous mode

3.3.1 Reading interval time

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

No interval

500ms

**1000ms

1500ms

2000ms

3.3.2 Same code reading delay

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

**The same code reading delay open

The same code reading delay off

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

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

500ms

**1000ms

3000ms

5000ms

Infinite delay

3.3.3 Single reading time

Please refer to section 3.1.2 for the setting of single reading time duration setting.

3.4 Induction mode

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

Induction mode

3.4.1 Single reading time

Please refer to section 3.1.2 for the setting of single reading time duration setting.

3.4.2 Reading interval time

Please refer to the setting code of reading interval time in section 3.3.1 to set the reading interval time.

3.4.3 Same code reading delay

For the setting of code reading delay for the same code, please refer to section 3.3.2.

3.4.4 Sensitivity

Sensitivity refers to the degree of change in the detection scene in the induction reading mode. When the reading module judges that the degree of scene change meets the requirements, it will switch from the monitoring state to the reading state (normal sensitivity and high sensitivity are recommended first).

Low sensitivity

Normal sensitivity

** High sensitivity

Very high sensitivity

3.4.5 Image stabilization time

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

**0ms

100ms

400ms

1000ms

2000ms

3.6 Reading area

For different applications, there will be some differences in the identifiable areas required by users, which can be set by scanning the following setting codes.

3.6.1 Full area

When the reading area is a full-width area, the reading module will scan the barcode to the surrounding area with the center as the priority, and the barcode can be located at any position on the screen.

**Full area

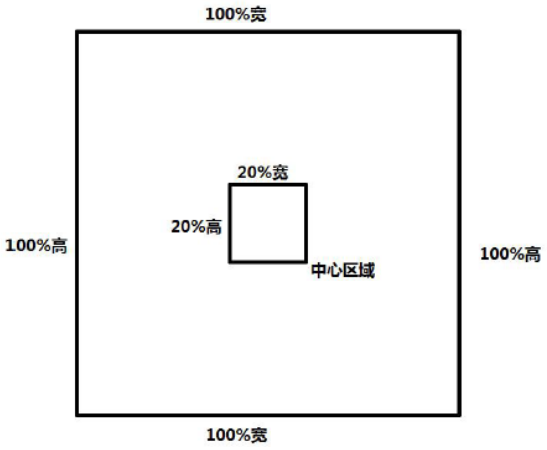
3.6.2 Central area only

When the reading area is the central area, the center of the barcode must be located within the set central area, and the barcodes not within this area will not be recognized and output.

Central area only

Set the center area size:

The central area is an area with the center of the entire image as the center point. The size of the area is set in proportion to the width or height of the entire image. The value range is 1-100; if the set value is 20, that is An area located in the center with an area of 20% of the width * 20% of the height.



Modify the size of the center area

The commonly used center area size can be set by scanning the following setting codes:

Central area-20% Central area-40% Central area-60%

When the size of the common center area does not meet the needs, the user can also customize the configuration by scanning the "Modify the center area size" setting code.

Modify the size of the center area

Example: Modify the size of the center area to 50%

1. Check the character table to get the hexadecimal value of the four characters of "50": "32";

2. Confirm whether the setting code is enabled. If it is not enabled, please scan the “Enable Setting Code” setting code (see chapter 1.5.2 for details);

3. Scan the "Modify center area size" setting code;

4. Scan the data setting codes "3" and "2" in sequence (see Appendix E: Data Codes for details);

5. Scan the “Save” setting code (see chapter 9 for detail).

Chapter 4 Light Filling and Positioning

4.1 Fill light

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

- Normal lighting (default setting): The lighting is on when shooting and reading, and is off at other times;
- Lighting is always on: the lighting continues to glow after the reading module is turned on;
- No Lighting: The light does not come on under any circumstances.

** Normal lighting

Lighting is always on

No Lighting

4.2 Position

External lighting users can control the external fill light by setting the following setting codes.

**External fill light mode-off

External fill light mode-on

**External fill light high level-on

External fill light low level-on

4.3 Position

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

- Aiming normal (default setting): The reading module only casts the aiming beam when shooting and reading;
- Aiming is always on: After the reading module is powered on, it will continue to project the aiming beam;
- No Aiming: The aiming beam is extinguished under any circumstances.

** Aiming normal

Aiming is always on

No Aiming

Chapter 5 Prompt Output

5.1 Buzzer master switch

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

Mute-on

** Mute-off

5.2 Buzzer settings

5.2.1 Passive buzzer

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

Passive_low frequency ** Passive_midband frequency Passive_High Frequency

5.2.2 Active buzzer

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

Active buzzer

** High level

Low level

5.3 All beeps

Read "Enable Mute" to turn off all beeps, and read "Disable Mute" to cancel the mute setting.

** Disable Mute

Enable Mute

5.4 Power-on prompt

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

** Boot Prompt-On Boot Prompt-Off

5.5 Reading beep

The reading prompt tone includes the setting prompt tone and the successful code scanning tone:

**Enable beep

Disable beep

5.5.1 Setting beeps

** The setting success tone- Turn on

The setting success tone - Turn off

5.5.2 Reading success tone

** prompt tone for successful reading- Turn on

prompt tone for successful reading- Turn off

5.5.3 Reading prompt tone duration

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

30ms

**60ms

90ms

120ms

5.6 Boot LED prompt

5.6.1 Boot prompt LED settings

Read "Enable boot LED prompt" to enable the reading engine to output a high level pulse on the DLED pin of 12PIN, read "Disable boot LED prompt" to cancel the high level of DLED pin pulse output.

Enable boot LED prompt

**Disable boot LED prompt

5.6.2 Power-on prompt LED duration

100ms

**200ms

300ms

500ms

1000ms

2000ms

5.7 Read success LED prompt

5.7.1 Reading prompt LED settings

Reading "enable reading successful LED prompt" enables the scanning engine to output a high-level

pulse on the DLED pin of the 12PIN after reading the barcode successfully, and reading "close reading successful LED prompt" will cancel DLED pin high level pulse output.

Reading successful LED prompt-enable

Reading successful LED prompt-disable

5.7.2 Read Prompt LED Duration

30ms

**60ms

90ms

120ms

200ms

500ms

5.8 Vibration prompt for successful reading

5.8.1 Vibration reminder settings

Vibration for successful reading-enable

Vibration for successful reading-disable

Vibration high level

Vibration low level

5.8.1 Vibration duration setting

**100ms

200ms

300ms

400ms

5.9 National keyboard settings

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

** American keyboard

Czech keyboard

French keyboard

German/ Austria keyboard

Hungarian keyboard

Italian keyboard

Japanese keyboard

Spanish keyboard

Turkish Q keyboard

Turkish F keyboard

Portugal keyboard

Brazil (Portuguese) keyboard

U.K. keyboard

Netherlands keyboard

Finland keyboard

Denmark keyboard

Poland keyboard

Sweden keyboard

Belgium (French) keyboard

Keyboard - Norwegian (Southern Sami) keyboard

Slovakia keyboard

Romania keyboard

Israel (Hebrew) keyboard

Swiss (German) keyboard

Latin America (Spanish) keyboard

Russia keyboard

Canada (French) keyboard

Greece keyboard

Thailand keyboard

5.10 Virtual keyboard enable

In order to adapt to the application environment in more regions, you can set the standard/virtual keyboard output by reading the following setting codes. However, a certain output efficiency will be lost. Note that when using the virtual keyboard, you must ensure that the number keys of the small keyboard on the PC side are enabled.

** Standard keyboard

virtual keyboard

1. Virtual keyboard output method

In order to be able to adapt to different application scenarios, the virtual keyboard has two different output methods for control characters smaller than 0x20. The user can switch by scanning the following

setting codes.

Ctrl mode

**Alt mode

5.11 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 to realize the conversion and output of the invoice code format. Invoicing modes include local invoicing mode and online invoicing mode. After the billing mode is enabled, the default is local billing mode.

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

** Invoicing mode enabled

Invoicing mode disabled

5.12 Read device version information

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

Read device version information

5.13 Rread device ID

In order to obtain the unique ID of the device, it can be confirmed by "reading the unique ID of the device" barcode.

ID Read device ID

Chapter 6 Data Editing

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

Data editing includes:

- Add prefix (Prefix)
- Add suffix (Suffix)
- Data segment interception of decoded data
- Output barcode identification code AIM ID;
- Output barcode Code ID
- Decoding failure characteristic output information (RF information)
- Add end character (Tail)

The output data format after processing:

[Prefix] [AIM ID] [Code ID] [Data] [Suffix] [Tail]

6.1 Prefix

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

Allow prefix ** Prohibit adding prefix

Scan the "Modify Prefix" setting code and combine the scan data setting code, the user can modify the prefix content, use two hexadecimal values for each prefix character, the prefix allows up to 15 characters, the hexadecimal conversion table of character values Available for reference.

Modify prefix

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

6.2 Suffix

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

Allow suffix

** Prohibit adding suffix

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

Modify suffix

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

6.3 AIM ID

AIM is the abbreviation of Automatic Identification Manufacturers (Automatic Identification Manufacturers Association). AIM ID defines identification codes for various standard barcodes (users

cannot customize AIM ID). For specific definitions, see (Appendix B: AIM ID List). The scanning engine can add this identification code before the barcode data after decoding, the format is: "]" + letter "C" + number "0", for example, the AIM ID of Code 128 is "]C0".

Add AIM ID

Users can identify different barcode types through AIM ID. The AIM ID corresponding to each barcode type cannot be freely modified by users. Code ID is identified by three characters.

Allow adding AIM ID

**Do not add AIM ID

6.4 Code ID

6.4.1 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 to add Code ID

** Prohibit adding Code ID

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

Restore the Code ID of all barcodes to value of 0

Restore the Code ID of all barcodes to value of 1

Restore the Code ID of all barcodes to value of 2

6.4.2 Modify Code ID

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

Modify the Code ID of EAN13

Modify the Code ID of EAN8

Modify the Code ID of UPC-A

Modify Code ID of UPC-E0

Modify the Code ID of UPC-E1

Modify Code ID of Code 128

Modify Code ID of Code 39

Modify Code ID of Code 93

Modify Codabar's Code ID modification

Modify the Code ID of Interleaved 2 of 5

Modify the Code ID of Industrial 25

Modify the Code ID of Matrix 2 of 5

Modify Code ID of Code11

Modify the Code ID of MSI Plessey

Modify the Code ID of RSS-14

Modify the Code ID of the limited RSS

Modify the Code ID of the extended RSS

Modify the Code ID of the QR Code

Modify the Code ID of Data Matrix

Modify the Code ID of PDF417

Modify Code ID of Mico QR

Modify the Code ID of the Qualified ISBN

Modify Code ID of Micro PDF417

Modify the Code ID of GS1STACK

Modify the Code ID of ISSN

Modify Aztec's Code ID

6.5 Terminator (Tail)

Closing terminator

** Modify the terminator suffix to CR

Modify the terminator suffix to TAB

Modify the terminator suffix to CRLF

Modify the terminator to two CRLFs

Modify the terminator suffix to CRDownArrow

6.6 Data stage

6.6.1 Date segment interception

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

The decoding information Data consists of 3 parts:

【Start】【Center】【End】

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

** Transfer the entire data

Only transfer the Start segment

Only the End segment is transmitted

Only transfer Center section

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, combined with the "data code" and "saving" setting codes. Both the Start segment and the End segment allow up to 255 characters, and both lengths are represented by one hexadecimal character. Please refer to Appendix F for the character corresponding hexadecimal conversion table.

Modify the length of the Start segment

Modify the length of the End section

Only the Start segment is transmitted

Example: When the decoding information is "1234567890123ABC", output the first thirteen bytes "1234567890123"

1. Check the character table (Appendix D: ASCII code list) to get the hexadecimal character corresponding to the decimal data "13" as "0D";

2. Confirm whether the setting code is enabled. If it is not enabled, please scan the “Enable Setting Code” setting code (see section 1.1);

3. Scan the setting code of "cut length M before modification";

4. Scan the data setting code (Appendix E: Data Code) "0" and "D" in turn;

5. Scan the "Save" setting code (see section 9.1);

6. Scan the "Transfer Start segment only" setting code

Only the End segment is transmitted

Example: When the decoding information is "1234567890123ABC", output the last three bytes "ABC"

1. Check the character table (Appendix D: ASCII code list) to get the hexadecimal character corresponding to the decimal data "3" as "03";

2. Confirm whether the setting code is enabled. If it is not enabled, please scan the “Enable Setting Code” setting code (see section 1.1);

3. Scan the setting code of "Intercept length N after modification";

4. Scan the data setting code (Appendix E: Data Code) "0" and "3" in turn;

5. Scan the "Save" setting code (see section 9.1);

6. Scan the "Transfer only End segment" setting code.

Only transfer the Center segment

Example: When the decoding information is "12345678900123ABC", output the middle four bytes "0123"

1. Check the character table (Appendix D: ASCII code list) to get the hexadecimal characters corresponding to the decimal data "10" and "3" as "0A", "0A", "3"
"03";

2. Confirm whether the setting code is enabled. If it is not enabled, please scan the “Enable Setting Code” setting code (see section 1.1);

3. Scan the setting code of "Intercept length N after modification";

4. Scan the data setting code (Appendix E: Data Code) "0" and "3" in turn;

5. Scan the "Save" setting code (see section 9.1);

6. Scan the setting code of "cut length M before modification";

7. Scan the data setting code (Appendix E: Data Code) "0" and "A" in turn;

8. Scan the "Save" setting code (see section 9.1);

9. Scan the "Transfer Center Segment Only" setting code.

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 make corresponding adjustments or operations after detecting this information. Users can freely define RF information.

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

Allow sending RF information

** Prohibit sending RF information

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

Modify RF information

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

Example: Modify user-defined RF information to "FAIL"

1. Check the character table (Appendix D: ASCII code list) to get the hexadecimal values of the four characters of "FAIL": "46", "41", "49", "4C";

2. Confirm whether the setting code is enabled. If it is not enabled, please scan the “Enable Setting Code” setting code (see section 1.1);

3. Scan the "Modify RF Information" setting code;

4. Scan the data setting code (Appendix E: Data Code) "4", "6", "4", "1", "4", "9", "4", "C" in turn;

5. Scan the "Save" setting code (see section 9.1).

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

☞ Note: The protocol mode must adopt the UTF-8 encoding output format. Under other output encoding formats, no matter whether the output with protocol is selected, only pure data can be output.

** Pure data output

With protocol output

6.9 HID KBW output compatibility mode

Toggle HID KBW compatibility by scanning the following setup codes. "Compatibility mode 1" can be compatible with Sogou input method.

* *Compatibility Mode 1

Compatibility Mode 2

Chapter 7 Quick Operations

7.1 Fast POS mode

POS mode features:

- Reading mode: command trigger mode
- Communication port: serial port
- Turn off the power-on prompt
- It is forbidden to add terminator

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

Fast POS mode

Chapter 8 Symbology Settings

8.1 Global shortcuts

8.1.1 Global operation

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

Enable all types

Disable all types

** Open the default reading type

8.1.2 Improved literacy

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

** Prohibition of strengthening literacy

Reading ability enhancement enable

8.2 One-dimensional barcode operation

8.2.1 EAN 13

1. Permit and prohibit the reading function

The user can allow or prohibit the EAN13 barcode reading function by reading the following setting codes.

** Enable EAN13

Disable EAN13

2. Additional code forced output function allows and prohibits

The user can enable or disable the forced output function of EAN13 additional codes by reading the following setting codes.

EAN13 forced output additional codes

** EAN13 no require additional codes

Users can read the following setting codes to configure the EAN13 additional code enabling and disabling.

EAN13-2 bit additional code enable

** EAN13-2 digits additional code disable

EAN13-5 additional code enable

** EAN13-5 additional code disable

3. Check digit output function allows and prohibits

** Allow sending EAN13 check digit

Prohibit sending EAN13 check digit

8.2.2 EAN 8

1. Permit and prohibit the reading function

The user can enable or disable the EAN8 barcode reading function by reading the following setting codes.

** Enable EAN8

Disable EAN8

2. Additional code forced output function allows and prohibits

The user can enable or disable the forced output function of EAN8 additional codes by reading the following setting codes.

EAN8 forced output additional code

** EAN8 no need additional codes to be output

Users can read the following setting codes to configure the EAN8 additional code enabling and disabling.

EAN8-2 bit additional code enable

** EAN8-2 bit additional code disable

EAN8-5 bit additional code enable

** EAN8-5 bit additional code disable

3. Check digit output function allows and prohibits

** Allow sending EAN8 check digit

Prohibit sending EAN8 check digit

4. EAN-8 to EAN-13

You can enable or disable the function of converting EAN-8 to EAN-13 by scanning the following setting codes.

EAN-8 to EAN-13-enable

**EAN-8 to EAN-13-disable

8.2.3 UPC-A

1. Permit and prohibit the reading function

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

** Enable UPC-A

Disable UPC-A

2. Additional code forced output function allows and prohibits

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

UPC-A forced output additional code

**UPC-A no need additional codes to be output

UPC-A can be read with or without additional code

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

UPC-A-2 bit additional code enable

** UPC-A-2 bit additional code disable

UPC-A-5 bit additional code enable

** UPC-A-5 bit additional code disable

3. UPC-A conversion EAN13 enable

The user can allow/disable the conversion of UPC-A to EAN13 by reading the following setting codes.

Allow UPC-A to EAN13

** Prohibit UPC-A to EAN13

4. Check digit output function allows and prohibits

** Allow sending UPC-A check digit

Prohibit sending UPC-A check digit

8.2.4 UPC-E0

1. Permit and prohibit the reading function

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

** Enable UPC-E0

Disable UPC-E0

2. Additional code forced output function allows and prohibits

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

UPC-E0 forced output additional code

** UPC-E0 does not require additional code output

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

UPC-E0-2 bit additional code enable

** UPC-E0-2 bit additional code disable

UPC-E0-5 bit additional code enable

** UPC-E0-5 bit additional code disable

3. Check digit output function allows and prohibits

** Allow sending UPC-E0 check digit

Prohibit sending UPC-E0 check digit

8.2.5 UPC-E1

1. Permit and prohibit the reading function

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

** Enable UPC-E1

Disable UPC-E1

2. Additional code forced output function allows and prohibits

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

UPC-E1 forced output additional code

** UPC-E1 no require additional code output

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

UPC-E1-2 bit additional code enable

** UPC-E1-2 additional code disable

UPC-E1-5 bit additional code enable

** UPC-E1-5 additional code disable

3. Check digit output function allows and prohibits

** Allow sending UPC-E1 check digit

Prohibit sending UPC-E1 check digit

3. UPC-E to UPC-A

UPC-E to UPC-A-enable

**UPC-E to UPC-A-disable

8.2.6 Code128

1. Permit and prohibit the reading function

The user can enable or disable the Code128 barcode reading function by reading the following setting codes.

**Enable Code128

Disable Code128

2. Reading length setting

Users can set the min and max reading length of Code128 by reading the following setting codes.

** The min length of Code128 is 0

The min length of Code128 is 4

8.2.7 Code39

1. Permit and prohibit the reading function

The user can enable or disable the barcode reading function of Code39 by reading the following setting codes.

** Enable Code39

Disable Code39

2. Reading length setting

Users can set the min and max reading length of Code39 by reading the following setting codes.

** The min length of Code39 information is 0

The min length of Code39 message is 4

3. Code39 check settings (Modulo 43)

Code 39 barcode data is not mandatory to include check character, if there is check character, it must be the last byte of data. The check character is the value calculated from all data except the check character, which is used to check whether the data is correct.

- Set to "Disable Verification", the scanner will transmit all barcode data normally.
- Set to "Enable verification, do not transmit verification characters", the scanner will verify according to the last digit of the barcode data, if the verification passes, it will transmit normal data except the last verification character, and the verification fails Barcode content will not be sent.
- If set to "Enable check, send check character", the scanner will check according to the last digit of barcode data. If the check passes, the check character will be transmitted together as the last digit of normal data. Send barcode content.

** Code39 not output check digit

Code 39 Enable check, no transmit check character

Code 39 Enable check, transmit check character

4. Start character and end character output settings

The user can set the output of Code39 start character and end character by reading the following setting codes.

Code39 start character output

** Code39 start character not output

Code39 terminator output

** Code39 terminator is not output

5. Code32 mode

Users can set whether Code39 supports Code32 mode by reading the following setting codes.

Code32 mode enable

** Code32 mode disable

6. FullAsc mode

Users can set whether Code39 supports FullAsc mode by reading the following setting codes.

Support FullAsc mode

** Not support FullAsc mode

8.2.8 Code93

1. Permit and prohibit the reading function

The user can enable or disable the Code93 barcode reading function by reading the following setting codes.

** Enable Code93

Disable Code93

2. Reading length setting

Users can set the min and max reading length of Code93 by reading the following setting codes.

** The min length of Code93 is 0

The min length of Code93 is 4

3. Code93 check settings

Code 93 barcode data is not mandatory to include check character, if there is check character, it must be the last 2 characters of the data. The check character is the value calculated from all data except the check character, which is used to check whether the data is correct.

 Set to "Disablecheck", the scanner will transmit all barcode data normally.

 Set to "Enablecheck, do not transmit check characters", the scanner will verify according to the last 2 digits of the barcode, if the check is passed, it will transmit normal data except the last 2 verification characters, and the verification fails Barcode content will not be sent.

 If set to "Enable check, send check character", the scanner will check according to the last 2 digits of barcode data. If the check passes, the check character will be transmitted together as the last 2 digits of normal data. Send barcode content.

Disable check

**Enable check, do not transmit check characters

Enable check, send check character

8.2.9 CodaBar

1. Permit and prohibit the reading function

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

** Enable CodaBar

Disable CodaBar

2. Reading length setting

Users can set the min and max reading length of CodaBar by reading the following setting codes.

** The min length of CodaBar is 0

The min length of CodaBar is 4

3. Start and end character output settings

There is one byte of data before and after the Codabar barcode data as the start character and the end character. The start character and the end character are one of the four characters "A", "B", "C", "D", which can be set Whether to transmit the start and terminator together with the barcode data after successful reading.

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

CodaBar start and end symbol output

** CodaBar start and end symbols not output

4. Check digit output setting

Codabar barcode data is not mandatory to include check character, if there is check character, it must be the last byte of the data. The check character is the value calculated from all data except the check character, which is used to check whether the data is correct.

 Set to "Disablecheck", the scanner will transmit all barcode data normally.

 Set to "Enablecheck, do not transmit check characters", the scanner will verify according to the last digit of the barcode data, if the check passes, it will transmit normal data except the last digit of the check character, and the check fails. Barcode content will not be sent.

 If set to "Enablecheck, send check character", the scanner will check according to the last digit of barcode data. If the check passes, the check character will be transmitted together as the last digit of normal data. Barcode content is not sent.

The user can set the CodaBar check digit output by reading the following setting codes.

Disable check

**Enable check, do not transmit check characters

Enable check, send check character

8.2.10 Interleaved 2 of 5

1. Permit and prohibit the reading function

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

Enable Interleaved 2 of 5

** Disable Interleaved 2 of 5

2. Reading length setting

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

The min length of Interleaved 2 of 5 is 0

** The min length of Interleaved 2 of 5 is 4

3. Interleaved 2 of 5 check settings (Mod-10)

Interleaved 2 of 5 barcode data is not mandatory to include check character, if there is check character, it must be the last byte of data. The check character is the value calculated from all data except the check character, which is used to check whether the data is correct.

 Set to "Disablecheck", the scanner will transmit all barcode data normally.

 Set to "Enablecheck, do not transmit check characters", the scanner will verify according to the last digit of the barcode data, if the check passes, it will transmit normal data except the last digit of the check character, and the check fails. Barcode content will not be sent.

 If set to "Enablecheck, send check character", the scanner will check according to the last digit of barcode data. If the check passes, the check character will be transmitted together as the last digit of normal data. Barcode content is not sent.

The coding digits of Interleaved 2 of 5 barcode must be an even number, and the check character is included in the code. If the code is an odd number, 0 is added before the first digit. The check character is automatically generated during coding.

**Disable check

Enable check, do not transmit check characters

Enable check, send check character

4. ITF-14

ITF-14 is an Interleaved 2 of 5 barcode with a specific format, its total data length is 14 bytes, and the last byte is a check character fixed for check.

Enable ITF-14

**Disable ITF-14

5. ITF-6

Similar to ITF-14, ITF-6 is an Interleaved 2 of 5 (Interleaved 2 of 5) in a specific format with a fixed total length of 6 bytes and a fixed requirement for checking.

Enable ITF-6

**Disable ITF-6

8.2.11 Industrial 25

1. Permit and prohibit the reading function

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

Enable Industrial 25

** Disable Industrial 25

2. Reading length setting

Users can set the min and max reading length of Industrial 25 by reading the following setting codes.

The min length of the Industrial 25 is 0

** The min length of the Industrial 25 is 4

3. Industrial 25 check settings (Mod-10)

Industrial 25 barcode data is not mandatory to include check character, if there is check character, it must be the last byte of the data. The check character is the value calculated from all data except the check character, which is used to check whether the data is correct.

 Set to "Disablecheck", the scanner will transmit all barcode data normally.

 Set to "Enable check, do not transmit check characters", the scanner will verify according to the last digit of the barcode data, if the check passes, it will transmit normal data except the last digit of the check character, and the check fails. Barcode content will not be sent.

 If set to "Enablecheck, send check character", the scanner will check according to the last digit of barcode data. If the check passes, the check character will be transmitted together as the last digit of normal data. Barcode content is not sent.

**Disable check

Enable check, do not transmit check characters

Enable check, send check character

8.2.12 Matrix 2 of 5

1. Permit and prohibit the reading function

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

Enable Matrix 2 of 5

** Disable Matrix 2 of 5

2. Reading length setting

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

The min length of Matrix 2 of 5 is 0

** The min length of Matrix 2 of 5 is 4

3. Matrix 2 of 5 Checkout Settings (Mod-10)

Matrix 2 of 5 barcode data is not mandatory to include check character, if there is check character, it must be the last byte of data. The check character is the value calculated from all data except the check character, which is used to check whether the data is correct.

 Set to "Disable Verification", the scanner will transmit all barcode data normally.

 Set to "Enable verification, do not transmit verification characters", the scanner will verify according to the last digit of the barcode data, if the verification passes, it will transmit normal data except

the last digit of the verification character, and the verification fails. Barcode content will not be sent.

 If set to "Enable verification, send check character", the scanner will check according to the last digit of barcode data. If the check passes, the check character will be transmitted together as the last digit of normal data. Barcode content is not sent.

**Disable check

Enable check, do not transmit check characters

Enable check, send check character

8.2.13 Code11

1. Permit and prohibit the reading function

Users can enable and disable the Code11 barcode reading function by reading the following setting codes.

Enable Code11

** Disable Code11

2.Reading length setting

Users can set the min and max reading length of Code11 by reading the following setting codes.

The min length of Code11 is 0

** The min length of Code11 is 4

3. Code11 check settings

Code 11 barcode data is not mandatory to include check character, if there is check character, it can be the last 1 or 2 characters of the data. The check character is a value calculated from all data to verify that the data is correct.

Therefore, set to "Disable check" and the scanner will transmit all barcode data normally.

**Disable check

Enable check, do not transmit check characters

Enable check, send check character

8.2.14 MSI Plessey

1. Permit and prohibit the reading function

Enable Plessey

** Disable MSI Plessey

2.Reading length setting

Users can set the min and max reading length of MSI Plessey by reading the following setting codes.

The min length of MSI Plessey is 0

** The min length of MSI Plessey is 4

3. MSI-Plessey Checkout Settings

MSI-Plessey barcode data is not mandatory to include check character, if there is check character, it is the last 1 or 2 characters of the data. The check character is the value calculated from all data except the check character, which is used to check whether the data is correct. If set to "Disable check", the scanner will transmit all barcode data normally.

**Disable check

one- digit check

two-digit check

4. Send check character

When set to "Enable, don't transmit check character", if the data length is less than the minimum reading code length limit after deducting 2 bytes of check character, the code reading will fail.

** Send check character

Do not transmit check character

8.2.15 GS1-Databar (RSS)

1. Permit and prohibit the reading function

Users can perform RSS-14 barcode Permit and prohibit the reading function by reading the following setting codes.

Enable RSS-14

** Disable RSS-14

**Transmit (01) character

No transmit (01) character

2.Reading length setting

The min length of extended RSS is 0

** The min length of extended RSS is 4

8.2.16 Limited RSS

1.Permit and prohibit the reading function

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

Enable limited RSS

** Disable limited RSS

**Transmit (01) character

No transmit (01) character

8.2.17 Extended RSS

1.Permit and prohibit the reading function

Users can perform extended RSS barcode permit and prohibit the reading function by reading the following setting codes.

Enable extended RSS

** Disable extended RSS

**Transmit (01) character

No transmit (01) character

8.2.18 ISSN

1. Permit and prohibit the reading function

Enable ISSN

** Disable ISSN

2. ISSN Additional Code Settings

Read the following setting codes to configure ISSN additional code read enable or disable.

**2-digit additional code disable

2-digit additional code enable

3. ISSN output method

After reading the following setting codes, it can be configured to output only after reading the enabled additional code, or output without reading the enabled additional code.

**Output without reading the enabled additional code

Output after reading the enabled additional code

8.2.19 ISBN

1. Permit and prohibit the reading function

Enable ISBN

** Disable ISBN

2. ISBN Additional Code Settings

Read the following setting codes to configure ISBN additional code read enable or disable.

**5-digit additional code disable

5-digit additional code enable

3. ISBN output method

After reading the following setting codes, it can be configured to output only after reading the enabled additional code, or output without reading the enabled additional code.

**Output without reading the enabled additional code

Output after reading the enabled additional code

8.3 2D code setting

8.3.1 QR Code

1.QR Code enable/disable

Users can perform QR Code Permit and prohibit the reading function by reading the following setting codes。

**Enable QR

Disable QR

8.3.2 Mico QR

Users can perform Mico QRPermit and prohibit the reading function by reading the following setting codes

Enable Mico QR

**Disable Mico QR

8.3.3 Data Matrix （DM）

1. Data Matrix enable/disable

Users can perform Data Matrix Permit and prohibit the reading function by reading the following setting codes

**Enable DM

Disable DM

2. DM code double code reading

Data Matrix Double Code: Two Data Matrix barcodes arranged up and down or left and right. The direction of the double code should be the same, the difference should be as small as possible, and the distance should be as close as possible. The dual code setting is divided into the following three setting modes.

 Only read a single Data Matrix code: The device only reads one Data Matrix barcode at a time at any time.

 Only read the double Data Matrix code: The device must detect the Data Matrix double code at any time, and only send the decoding information after both codes are successfully decoded. The sending order is top to bottom or left to right.

 Readable single and double Data Matrix code: When reading the code, first check whether the Data Matrix double code exists. If it exists and decodes successfully, it will be sent according to the double code, otherwise it will be treated as a single code.

**Only read a single DM

Readable single and double DM

8.3.4 PDF417

Users can perform PDF417Permit and prohibit the reading function by reading the following setting codes

**Enable PDF417

Disable PDF417

8.3.5 Micro PDF 417

Users can perform Micro PDF417 code permit and prohibit the reading function by reading the following setting codes

Enable Micro PDF 417

**Disable Micro PDF 417

8.3.6 Aztec

User can enable/disable Aztec code by following setting codes

Enable Aztec

**Disable Aztec

8.4 Reverse reading mode

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

** 1D barcodes reverse color disable

1D barcodes reverse color enable

** 2D barcodes reverse color disable

2D barcodes reverse color enable

Chapter 9 Save And Cancel

9.1 Save

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

Save

9.2 Cancel

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

Cancel one bit of data previously read

Cancel a string of data previously read

Cancel current setting

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

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: Parameter setting example

- Example 1: Modify the prefix and customize it as DATA

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

2. Read the "Enable Setting Code"; (If it is already enabled, you can skip this step)

3. Read the "modify prefix" setting code

4. Read the data code "4" "4" "4" "1" "5" "4" "4" "1" one by one

5. Read the "Save" setting code

◆ Example 2: Modify the suffix and customize it as DATA

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

2. Read the "Enable Setting Code"; (If it is already enabled, you can skip this step)

3. Read the "modify suffix" setting code

4. Read the data code "4" "4" "4" "1" "5" "4" "4" "1" one by one

5. Read the "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 "Enable Setting Code"; (If it is already enabled, you can skip this step)

3. Read the setting code of "Modify EAN13 CODE ID"

4. Read the data code "4" and "1" one by one

5. Read the "Save" setting code

◆ Example 4:

[Only transmit Start segment] When the decoded information is "1234567890ABC", output the first 10 bytes "1234567890"

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

2. Read the "Enable Setting Code"; (If it is already enabled, you can skip this step)

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

4. Read the data code "0" "A" one by one

5. Read the "Save" setting code

6. Read the setting code of "transmit only the start segment"

◆ Example 5:

[Only transmit End segment] When the decoded information is "1234567890ABC", output the first 10 bytes "1234567890"

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

2. Read the "Enable Setting Code"; (If it is already enabled, you can skip this step)

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

4. Read the data code "0" "A" one by one

5. Read the "Save" setting code

6. Read the setting code of "Transmit only End segment"

◆ Example 6:

[Transfer Center section only] When the decoded information is "1234567890ABC1234567890", output the middle 3 bytes "ABC"

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

2. Read the "Enable Setting Code"; (If it is already enabled, you can skip this step)

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

4. Read the data code "0" "A" one by one

5. Read the "Save" setting code

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

7. Read the data code "0" "A" one by one

8. Read the "Save" setting code

9. Read the setting code of "Transfer Center Segment Only"

◆ Example 7: Modify the 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 "Enable Setting Code"; (If it is already enabled, you can skip this step)

3. Read the "modify RF information" setting code

4. Read the data codes "4" "6" "4" "1" "4" "9" "4" "C" one by one

5. Read the "Save" setting code

◆ Example 8: Modify the GS replacement character to "D"

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

2. Read the "Enable Setting Code"; (If it is already enabled, you can skip this step)

3. Read the "GS character replacement enable" setting code (if it has been enabled, you can skip this step)

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

5. Sequentially read the data code "4" "4"

6. Read the "Save" setting code

Appendix C: Default Setting Table

Parameter name		Default setting	Remark
Setting code			
Setting code function		Turn on	
Communication settings			
Communication mode		USB-HID	
TTL-232	Serial port baud rate	9600bps	
	Serial port check digit	No check digit	
	Serial data bit	8 位	

	Serial stop bit	1 位	
	Hardware flow control	None	
USB-HID	USB-HID device selection	USB-KBW	
	PC to HID device access cycle	1ms	Scope：1～64ms
	Interval before HID release	1ms	Scope：1～63ms
	Interval after HID release	1ms	Scope：1～63ms
	CapsLock state	Off	
	HID leading key output	Disable	
Scan code mode parameters			
Default reading mode:		**Manual mode**	
Manual mode	Trigger method	Level trigger	
	Single reading time	5000ms	Scope：100ms～25500ms, Step length 100ms, 0 means unlimited
	Deep sleep	closure	Sleep time: 0-3276700ms Step length: 100ms
Command trigger mode	Trigger conditions	Command trigger	7E 00 08 01 00 02 01 AB CD
	Trigger command response	permission	
	Single reading time	5000ms	Range: 100ms～25500ms Step length 100ms 0x00: unlimited length
Continuous mode	Reading interval	1000ms	Range: 0～25500ms Step length 100ms
	Same code reading delay	No delay	Delay time range: 100ms～25500ms Step length 100ms 0x00: Infinite delay
	Single reading time	5000ms	Range: 100ms～25500ms

			Step length 100ms 0x00: unlimited length
	Continuous mode button pause switch	support	
Induction mode	Single reading time	5000ms	Range: 100～25500ms Step length 100ms 0x00: unlimited length
	Reading interval time	1000ms	Range: 0～25500ms Step length 100ms
	Same code reading delay	No delay	Delay time range: 100ms～25500ms Step length 100ms 0x00: Infinite delay
	Sensitivity	Normal sensitivity	Sensitivity parameter 1/2:00-FF The higher the parameter, the lower the sensitivity
	Image stabilization time	0ms	Range: 0～25500ms Step length 100ms
General settings			
Fill light/positioning	Positioning light	Lights up when taking pictures	
	Fill light	Lights up when taking pictures	
Buzzer	Buzzer settings	Passive buzzer	
	Passive buzzer	IF	
	Active buzzer	High level	Active high when working, active low when idle
	Mute	Closure	
Power-on prompt		Turn on	

Prompt for successful reading	Turn on	
Duration of the prompt tone for successful reading	60ms	Range 0-255ms
LED prompt for successful reading	Turn on	
Set code reading prompt	Turn on	
Output data format	GBK	
keyboard	America	
Virtual/standard keyboard	standard	
Control character output	closure	The virtual keyboard is closed by default, The default control character close mode after opening
Image mirror flip	prohibit	
Serial port simulation HID protocol	Disable	
Invoicing mode	Enable/local invoicing mode	
Data editing		
Prefix	No added	
Suffix	No added	
CODE ID	No added	
Terminator	CR（0x0D）	
Data segment interception	Transfer the entire data segment	
RF information	Do not send	
Output protocol	Pure data output	
GS character replacement	prohibit	
URL code reading	allow	
Symbology setting		
Reverse	prohibit	
Image mirror flip	prohibit	

Commodity code verification output	Enable	EAN13/EAN8/UPC-A/UPC-E0/UPC-E1
Improved literacy	prohibit	
EAN-13		
Read	allow	
Force output additional code	No requirement	
2-digit additional code	prohibit	
5-digit additional code	prohibit	
Check digit output	Output	
EAN-8		
Read	allow	
Force output additional code	No requirement	
2-digit additional code	prohibit	
5-digit additional code	prohibit	
Check digit output	Output	
UPC-A		
Read	allow	
Force output additional code	No requirement	
2-digit additional code	prohibit	
5-digit additional code	prohibit	
UPC-A 转 EAN13	prohibit	
Check digit output	Output	
UPC-E0		
Read	allow	
Force output additional code	No requirement	
2-digit additional code	prohibit	
5-digit additional code	prohibit	
Check digit output	Output	

UPC-E1		
Read	allow	
Force output additional code	No requirement	
2-digit additional code	prohibit	
5-digit additional code	prohibit	
Check digit output	Output	
Code128		
Read	allow	
Min length of information	0	
Max length of information	255	
Add prefix (11) function	closure	
Code 39		
Read	allow	
Min length of information	0	
Max length of information	255	
Start character	No Output	
Terminator	No Output	
Code32	Disable	
Code32 prefix Output	Output	Prerequisite: Code32 is enabled
FullAsc mode	Disable	
Processing check	No deal	
Check Bit Output	No Output	
Code 93		
Read	allow	
Min length of information	0	
Max length of information	255	
CodaBar		
Read	allow	

Min length of information	0	
Max length of information	255	
Start and end	No Output	
Interleaved 2 of 5		
Read	prohibit	
Min length of information	4	
Max length of information	32	
Check format	None	
Check Bit Output	No Output	
Industrial 25		
Read	prohibit	
Min length of information	4	
Max length of information	32	
Check format	None	
Check Bit Output	No Output	
Matrix 2 of 5		
Read	prohibit	
Min length of information	4	
Max length of information	32	
Check format	None	
Check Bit Output	No Output	
Code11		
Read	prohibit	
Min length of information	4	
Max length of information	32	
Check method	1bit	
Check Bit Output	No Output	
MSI Plessey		

Read	prohibit	
Min length of information	4	
Max length of information	32	
Check method	Single Mod10	
Check Bit Output	No Output	
RSS-14		
Read	prohibit	
AI with parentheses	With brackets	
Limited RSS		
Read	prohibit	
AI with parentheses	With brackets	
Extended RSS		
Read	prohibit	
Min length of information	4	
Max length of information	32	
AI with parentheses	With brackets	
Standard 2 of 5		
Read	prohibit	
Min length of information	4	
Max length of information	32	
check	closure	
Check Bit Output	No Output	
Plessey		
Read	prohibit	
Min length of information	4	
Max length of information	32	
check	closure	
Check Bit Output	No Output	

ChinaPost 25		
Read	prohibit	
Min length of information	4	
Max length of information	32	
check	closure	
Check Bit Output	No Output	
QR Code		
Read	allow	
Mode 1 reading	closure	
Add prefix (11)	closure	
PDF417		
Read	allow	
Data Matrix		
Read	allow	
Read multiple DM barcodes at the same time	prohibit	
Micro QR		
Read	allow	
Han Xin Code		
Read	prohibit	
Micro PDF417		
Read	prohibit	
Code 16K		
Read	prohibit	
Maxi Code		
Read	prohibit	
Aztec		
Read	prohibit	

Appendix D: Common serial port commands

Function	Serial command	Return command
Switch to manual mode (Both the positioning light and the fill light will light up when taking pictures)	7E 00 08 0100 00 D4 FF 60	02 00 00 01 00 33 31
Switch command trigger mode (Both the positioning light and the fill light will light up when taking pictures)	7E 00 08 0100 00 D5 EF 41	02 00 00 01 00 33 31
Switch command continuous mode (Both the positioning light and the fill light will light up when taking pictures)	7E 00 08 0100 00 D6 DF 22	02 00 00 01 00 33 31
Switch sensing mode (Both the positioning light and the fill light will light up when taking pictures)	7E 00 08 0100 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 response allowed	7E 00 08 01 00 01 04 07 2C	02 00 00 01 00 33 31
Trigger command response prohibit	7E 00 08 01 00 01 84 96 A4	02 00 00 01 00 33 31
Set the reading interval to 5s	7E 00 08 01 00 05 32 9D 7D	02 00 00 01 00 33 31
Set a single reading time 10s	7E 00 08 01 00 05 64 A7 4E	02 00 00 01 00 33 31
Set the baud rate (115200bps)	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 the baud rate (115200bps)	7E 00 07 01 00 2A 02 D8 0F	02 00 00 02 1A 00 82 D8
reset	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
Setting code on	7E 00 08 01 00 03 00 21 CA	02 00 00 01 00 33 31
TTL-232 Serial mode	7E 00 08 01 00 0D A0 B7 2F	02 00 00 01 00 33 31
Continuous mode	7E 00 08 01 00 00 D6 DF 22	02 00 00 01 00 33 31
Reading interval -3000ms	7E 00 08 01 00 05 1E 78 93	02 00 00 01 00 33 31
The same code reading delay is on	7E 00 08 01 00 13 80 B3 31	02 00 00 01 00 33 31
Same reading delay time -5000ms	7E 00 08 01 00 13 B2 A5 20	02 00 00 01 00 33 31
Boot Prompt-Off	7E 00 08 01 00 0E 16 25 61	02 00 00 01 00 33 31
Allow reading all types	7E 00 08 01 00 2C 02 17 50	02 00 00 01 00 33 31
Save current settings as user default settings	7E 00 08 01 00 D9 56 E1 15	02 00 00 01 00 33 31
Satrt to decode	7E 00 08 01 00 02 01 02 DA	02 00 00 01 00 33 31
Stop to decode	7E 00 08 01 00 02 00 12 FB	02 00 00 01 00 33 31
LED on	7E 00 08 01 00 00 D2 9F A6	02 00 00 01 00 33 31
LED off	7E 00 08 01 00 00 DA 1E AE	02 00 00 01 00 33 31

Appendix E: Code ID list

Barcode type	Corresponding characters	Flag 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
Mico 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	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 Setting Code Parameters

Setting code function	Setting code parameter content	Remark
Setting code on	00000000	If the setting code off, need to turn on the setting code firstly
TTL-232 Serial mode	01000000	
USB-HID mode	01000001	
USB- 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 checking（NONE）	01030000	
ODD checking	01030001	
EVEN checking	01030002	
PC to HID device access cycle -1ms	01040001	The last two digits of the parameter can be modified for other durations
PC to HID device access cycle -3ms	01040003	
PC to HID device access cycle -5ms	01040005	
PC to HID device access cycle -10ms	0104000A	
Time interval before HID release -1ms	01050001	The last two digits of the parameter

Time interval before HID release -2ms	01050002	can be modified for other durations
Time interval before HID release -5ms	01050005	
Time interval before HID release -10ms	0105000A	
Time interval after HID release -1ms	01060001	The last two digits of the parameter can be modified for other durations
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 prohibition	01080000	
HID preamble allowed	01080001	
Manual mode	02000000	
Level trigger	02010000	
Edge trigger	02010001	
Single reading time -1000ms	0202000A	The last two digits of the parameter can be modified for other durations
Single reading time -3000ms	0202001E	
Single reading time -5000ms	02020032	
Single reading time -10000ms	02020064	
Single reading time-unlimited	02020000	
Command trigger mode	02000001	
Continuous mode	02000002	
Trigger command response allowed	020A0001	
Trigger command response prohibition	020A0000	
Continuous mode button pause is not supported	020A0010	
Continuous mode button pause support	020A0011	
Reading interval-no interval	02050000	The last two digits of the parameter can be modified for other durations
Reading interval -500ms	02050005	

Reading interval -1000ms	0205000A	
Reading interval -3000ms	0205001E	
Reading interval -5000ms	02050032	
The same code reading delay is off	02060000	The duration parameter setting must first enable the same code reading delay
The same code reading delay is on	02060001	
Same reading delay time-infinite delay	02070000	
Same reading delay time -500ms	02070005	The last two digits of the parameter can be modified for other durations
Same reading delay time -1000ms	0207000A	
Same reading delay time -3000ms	0207001E	
Same reading delay time -5000ms	02070032	
Induction mode	02000003	
Normal sensitivity	0209640A	
Low sensitivity	020932A0	
High sensitivity	0209320A	
Very high sensitivity	02093205	
Image stabilization time -0ms	02080000	The last two digits of the parameter can be modified for other durations
Image stabilization time -100ms	02080001	
Image stabilization time -400ms	02080004	
Image stabilization time -1000ms	0208000A	
Image stabilization time -2000ms	02080014	
The fill light turns on when taking pictures	03000000	
Fill light-always on	03000001	
Fill light-always off	03000002	
Aiming light-lights up when taking pictures	03010000	
Aiming light-always on when taking pictures	03010003	
Aiming light-always on	03010001	

Aiming light-always off	03010002	
Deep sleep function is on	02030000	
Deep sleep function is off	02030001	
Mute-on	04000000	
Mute-off	04000001	
Passive buzzer settings	04010005	
Passive-low frequency	04010000	
Passive-mid frequency	04010001	
Passive-high frequency	04010002	
Active buzzer settings	04010006	
Active working level-high level	04010003	
Active working level-low level	04010004	
Set the alert tone-on	04020000	
Set the alert tone-off	04020001	
Boot Prompt-On	04030000	
Boot Prompt-Off	04030001	
LED prompt for successful reading-on	04040000	
LED prompt for successful reading-off	04040001	
Prompt for successful reading-on	04040002	
Prompt for successful reading-off	04040003	
Duration of the prompt tone for successful reading -30ms	0404011E	The last two digits of the parameter can be modified for other durations
Duration of the prompt tone for successful reading -60ms	0404013C	
Duration of the prompt tone for successful reading -90ms	0404015A	
Duration of the prompt tone for successful reading	04040178	

-120ms		
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	
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 American)	0406000A	
Standard keyboard	04070000	
virtual keyboard	04070001	
Virtual keyboard _Ctrl mode	04070010	
Virtual keyboard_Alt mode	04070011	
Control character output is off	04070012	
Image mirror flip-on	04080000	
Image mirror flip-off	04080001	
Reverse phase prohibition	04090000	
Reverse phase allowned	04090001	

Invoicing mode enabled	040B0000	
Invoicing mode disabled	040B0001	
Local invoicing mode	040B1000	
Online billing mode	040B1100	
Keypad digital output on	040C0000	
Keypad digital output off	040C0001	
Keypad operator output on	040C0002	
Keypad operator output off	040C0003	
Allow prefix	05000000	
Prohibit adding prefix	05000001	
Modify prefix	05000002	
Allow suffix	05010000	
No suffix	05010001	
Modify suffix	05010002	
Allow to add CODE ID	05020000	
Prohibit to add CODE ID	05020001	
Restore the default value of CODE ID	05020002	
Modify the CODE ID of EAN13	05030000	
Modify the CODE ID of EAN8	05030001	
Modify the CODE ID of UPC-A	05030002	
Modify the CODE ID of UPCE0	05030003	
Modify the CODE ID of UPCE1	05030004	
Modify the CODE ID of CODE128	05030005	
Modify the CODE ID of CODE39	05030006	
Modify the CODE ID of CODE93	05030007	
Modify the CODE ID of Code Bar	05030008	
Modify the CODE ID of Interleaved 2 of 5	05030009	

Modify the CODE ID of Industrial 25	0503000A	
Modify the CODE ID of Matrix 2 of 5	0503000B	
Modify the CODE ID of CODE11	0503000C	
Modify the CODE ID of MSI Plessey	0503000D	
Modify the CODE ID of RSS	0503000E	
Modify the CODE ID of the limited RSS	05030010	
Modify the CODE ID of the extended RSS	05030011	
Modify the CODE ID of QR CODE	05030012	
Modify the CODE ID of DataMatrix	05030013	
Modify the CODE ID of the limited PDF417	05030014	
Modify the CODE ID of Mico QR	05030015	
Modify Han Xin code CODE ID	05030016	
Modify the CODE ID of Micro PDF417	05030017	
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	
Modify the CODE ID of Code 49	0503001C	
Modify the CODE ID of Maxi Code	0503001D	
Modify Aztec's CODE ID	0503001E	
Closing terminator	05040000	
Add terminator CR	05040001	
Add terminator TAB	05040002	
Add terminator CRLF	05040003	
Transfer the entire data	05050000	
Only the Start segment is transmitted	05050001	
Only the End segment is transmitted	05050002	

Only the Center segment is transmitted	05050003	
Modify the length of the Start segment	05050004	
Modify the length of the End segment	05050005	
Allow sending RF information	05060000	
Prohibit sending RF information	05060001	
Modify RF information	05060002	
Pure data output	05070000	
With protocol output	05070001	
GS replacement is on	050A0000	
GS replacement is off	050A0001	
GS replacement information modification	050A0002	
Allow to read URL codes	050B0000	
Prohibit reading URL codes	050B0001	
Fast POS mode	06000000	
Serial port & full code open mode	06000001	
Allow reading all types	07000000	
Prohibit reading all types	07000001	
Allow literacy enhancement	07000007	
Prohibit literacy enhancement	07000008	
Open the default reading type	07000002	
Allow to send product code check digit	05090000	
Prohibit sending product code check digit	05090001	
Enable EAN13	07010000	
Disable EAN13	07010100	
EAN13 forced output additional code	07011000	
EAN13 does not require additional codes to be output	07011100	
EAN13-2 bit additional code enable	07012000	

EAN13-2 bit additional code disable	07012100	
EAN13-5 bit additional code enable	07013000	
EAN13-5 bit additional code disable	07013100	
Allow sending EAN13 check digit	07014000	
Prohibit sending EAN13 check digit	07014100	
Enable EAN8	07020000	
Disable EAN8	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	
Allow sending EAN8 check digit	07024000	
Prohibit sending EAN8 check digit	07024100	
Enable UPC-A	07030000	
Disable 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 enable	07033000	
UPC-A-5 bit additional code disable	07033100	
Allow UPC-A to EAN13	05080000	
Prohibit UPC-A to EAN13	05080001	
Allow sending UPC-A check digit	07034000	
Prohibit sending UPC-A check digit	07034100	

Enable UPC-E0	07040000	
Disable UPC-E0	07040100	
UPC-E0 forced output additional code	07041000	
UPC-E0 does not require additional code output	07041100	
UPC-E0-2 bit additional code enable	07042000	
UPC-E0-2 bit additional code disable	07042100	
UPC-E0-5 bit additional code enable	07043000	
UPC-E0-5 bit additional code disable	07043100	
Allow sending UPC-E0 check digit	07044000	
Prohibit sending UPC-E0 check digit	07044100	
Enable UPC-E1	07050000	
Disable UPC-E1	07050100	
UPC-E1 forced output additional code	07051000	
UPC-E1 does not require additional code 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 bit additional code disable	07053100	
Allow sending UPC-E1 check digit	07054000	
Prohibit sending UPC-E1 check digit	07054100	
Enable Code128	07060000	
Disable Code128	07060100	
The minimum length of Code128 information is 0	07061000	Other lengths can modify the last two digits of the parameter
The minimum length of Code128 information is 4	07061004	
The maximum length of Code128 information is 32	07061120	
The maximum length of Code128 information is 255	070611FF	
Code128 plus prefix (11)-on	07062000	

Code128 plus prefix (11)-off	07062100	
Enable Code39	07070000	
Disable Code39	07070100	
The minimum length of Code39 information is 0	07071000	Other lengths can modify the last two digits of the parameter
The minimum length of Code39 information is 4	07071004	
The longest length of Code39 message is 32	07071120	
The longest length of Code39 message is 255	070711FF	
Code39 start character output	07072000	
Code39 start character is not output	07072100	
Code39 terminator output	07073000	
Code39 terminator is not output	07073100	
Enable Code32	07074000	
Disable Code32	07074100	
Code32 prefix A output	07076000	
Code32 prefix A not output	07076100	
FullASCII supported	07075000	
FullASCII not supported	07075100	
Code39 handle check digit	07077000	
Code39 does not handle check digits	07077100	
Code39 output check digit	07078000	
Code39 does not output check digit	07078100	
Enable Code93	07080000	
Disable Code93	07080100	
The minimum length of Code93 information is 0	07081000	Other lengths can modify the last two digits of the parameter
The minimum length of Code93 information is 4	07081004	
The maximum length of Code93 information is 32	07081120	
The maximum length of Code93 information is 255	070811FF	

Enable CodaBar	07090000	
Disable CodaBar	07090100	
The minimum length of CodaBar information is 0	07091000	Other lengths can modify the last two digits of the parameter
The minimum length of CodaBar information is 4	07091004	
The maximum length of CodaBar information is 32	07091120	
The maximum length of CodaBar information is 255	070911FF	
CodaBar start and end character sending is allowed	07092000	
CodaBar start and end symbol sending is prohibited	07092100	
CodeBar does not handle verification	07093000	
CodeBar only MOD10 verification	07093100	
CodeBar only MOD16 verification	07093200	
CodeBar double check	07093300	
CodeBar output check digits	07094000	
CodeBar does not output check digits	07094100	
Enable Interleaved 2 of 5	070A0000	
Disable Interleaved 2 of 5	070A0100	
The minimum length of Interleaved 2 of 5 information is 0	070A1000	Other lengths can modify the last two digits of the parameter
The minimum length of Interleaved 2 of 5 information is 4	070A1004	
The maximum length of Interleaved2of5 information is 32	070A1120	
The maximum length of Interleaved2of5 information is 255	070A11FF	
Interleaved 2 of 5 check format is Mod10	070A2000	
Interleaved 2 of 5 check format is None	070A2100	
Interleaved 2 of 5 output check digits	070A3000	

Interleaved 2 of 5 does not output check digits	070A3100	
Enable Industrial 25	070B0000	
Disable Industrial 25	070B0100	
The minimum length of the Industrial 25 message is 0	070B1000	Other lengths can modify the last two digits of the parameter
The minimum length of the Industrial 25 message is 4	070B1004	
The longest length of Industrial 25 information is 32	070B1120	
The longest length of Industrial 25 information is 255	070B11FF	
Industrial 25 check format is Mode10	070B2000	
Industrial 25 check format is None	070B2100	
Industrial 25 output check digit	070B3000	
Industrial 25 does not output check digit	070B3100	
Enable Matrix 2 of 5	070C0000	
Disable Matrix 2 of 5	070C0100	
The shortest length of Matrix 2 of 5 information is 0	070C1000	Other lengths can modify the last two digits of the parameter
The shortest length of Matrix 2 of 5 information is 4	070C1004	
The longest length of Matrix 2 of 5 information is 32	070C1120	
The longest length of Matrix 2 of 5 information is 255	070C11FF	
Matrix 2 of 5 verification format is Mod10	070C2000	
Matrix 2 of 5 check format is None	070C2100	
Matrix 2 of 5 output check digits	070C3000	
Matrix 2 of 5 does not output check digits	070C3100	
Enable Code11	070D0000	
Disable Code11	070D0100	
The minimum length of Code11 information is 0	070D1000	Other lengths can modify the last two digits of the parameter
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	

Code11-1bit check	070D2000	
Code11-2bit check	070D2100	
Code11 output check digit	070D3000	
Code11 does not output check digit	070D3100	
Enable MSI Plessey	070E0000	
Disable MSI Plessey	070E0100	
The minimum length of MSI Plessey message is 0	070E1000	Other lengths can modify the last two digits of the parameter
The minimum length of MSI Plessey message is 4	070E1004	
The maximum length of MSI Plessey information is 32	070E1120	
The maximum length of MSI Plessey information is 255	070E11FF	
MSI Plessey verification format is single Mod10	070E2000	
MSI Plessey verification format is dual Mod10	070E2100	
MSI Plessey output check digits	070E3000	
MSI Plessey does not output check digits	070E3100	
Enable RSS-14	070F0000	
Disable RSS-14	070F0100	
RSS-14 AI output without brackets	070F5000	
RSS-14 AI output with brackets	070F5100	
Enable Limited RSS	070F1000	
Disable Limited RSS	070F1100	
Limited RSS AI output without brackets	070F7000	
Limited RSS AI output with brackets	070F7100	
Enable Extended RSS	070F2000	
Disable Extended RSS	070F2100	
Extended RSS AI output without brackets	070F9000	
Extended RSS AI output with brackets	070F9100	
The minimum length of the RSS message is 0	070F3000	Other lengths can modify the last

The minimum length of the RSS message is 4	070F3004	two digits of the parameter
The maximum length of the RSS message is 32	070F3120	
The maximum length of the RSS message is 255	070F31FF	
Enable Standard 2 of 5	07200000	
Disable Standard 2 of 5	07200100	
The minimum length of the Standard 2 of 5 message is 0	07201100	Other lengths can modify the last two digits of the parameter
The minimum length of the Standard 2 of 5 message is 4	07201104	
The maximum length of Standard 2 of 5 information is 32	07201120	
The maximum length of Standard 2 of 5 information is 255	072011FF	
Standard 2 of 5 checking-on	07202000	
Standard 2 of 5 checking-off	07202100	
Standard 2 of 5 does output check digit	07203000	
Standard 2 of 5 does not output check digit	07203100	
Enable Plessey	07210000	
Disable Plessey	07210100	
The minimum length of Plessey message is 0	07211100	Other lengths can modify the last two digits of the parameter
The minimum length of Plessey message is 4	07211104	
The maximum length of Plessey information is 32	07211120	
The maximum length of Plessey information is 255	072111FF	
Plessey check-on	07212000	
Plessey check-off	07212100	
Plessey output check digit	07213000	
Plessey does not output check digits	07213100	

Enable ChinaPost 25	07220000	
Disable ChinaPost 25	07220100	
The shortest message length of ChinaPost 25 is 0	07221100	Other lengths can modify the last two digits of the parameter
The shortest message length of ChinaPost 25 is 4	07221104	
The longest message length of ChinaPost 25 is 32	07221120	
The longest message length of ChinaPost 25 is 255	072211FF	
ChinaPost 25 verification-on	07222000	
ChinaPost 25 verification-off	07222100	
ChinaPost 25 does output check digit	07223000	
ChinaPost 25 does not output check digit	07223100	
Enable Code16K	07230000	
Disable Code16K	07230100	
The minimum length of Code16K message is 0	07231100	Other lengths can modify the last two digits of the parameter
The minimum length of Code16K message is 4	07231104	
The longest length of Code16K message is 255	07231120	
The longest length of Code16K message is 255	072311FF	
Enable Code49	07240000	
Disable Code49	07240100	
The minimum length of Code49 message is 0	07241100	Other lengths can modify the last two digits of the parameter
The minimum length of Code49 message is 4	07241104	
The longest length of Code49 message is 32	07241120	
The longest length of Code49 message is 255	072411FF	
Enable QR	07140000	
Disable QR	07140100	
QR Mode 1-On	07141000	
QR Mode 1-Off	07141100	
QR plus prefix (11)-on	07142000	

QR plus prefix (11)-off	07142100	
Enable DM	07150000	
Disable DM	07150100	
Allow to read multiple DMs at the same time	07151000	
Prohibit reading multiple DM barcodes at the same time	07151100	
Enable PDF417	07160000	
Disable PDF417	07160100	
Enable Hanxin code	07170000	
Disable Hanxin code	07170100	
Enable Micro PDF417	07180000	
Disable Micro PDF417	07180100	
Enable Micro QR	07190000	
Disable Micro QR	07190100	
Enable Maxi Code	071A0000	
Disable Maxi Code	071A0100	
Enable Aztec	071B0000	
Disable Aztec	071B0100	
Save	08000000	
Cancel the bit of previous data	08000001	
Cancel a string of data previously read	08000002	
Cancel modify 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	