2D Barcode Scanner Setting Manual

Chapter 1 Comprehensive Settings

Introduction

This manual is mainly used to introduce how to set the corresponding functions of the

scanner product;

There are two ways to set up the scanner.

Setting code

The scanner can set the corresponding function by reading the corresponding one or a

group of special barcodes. In the following chapters, we will introduce the corresponding

setting options and functions in detail and provide the corresponding setting codes

Instructions for use:

In manual barcode reading mode, the operation steps for scanning barcodes are as follows

1. Press and hold the trigger button of the scanner, the line of sight is activated, and a red line of sight appears.

2. Aim the red line of sight to the center of the barcode, move the scanner and adjust the distance between it and the barcode to find the best reading distance.

3. When you hear the success prompt sound and the red lighting line goes out, the code reading is successful, and the scanner transmits the data after reading the code to the host.

Note: During the reading process, for the same batch of barcodes, you will find that the distance between the scanner and the barcode is within a certain range, and the reading success rate will be very high. This distance is the best reading distance.

Enable and disable the configuration code

The setting code can be turned off. When the scanner is set to "Enable setting code" and

scanning the setting code, the setting function will take effect. When the scanner is set to

"Disable setting code", when scanning the setting code, an error tone of the scan engine will

appear and the setting function will not work. The default is "Enable Setting Code".

Enable setting code   Disable setting code

Sending setting code

The content of the setting code can be allowed to be sent. After reading the "send setting

code" and setting successfully, the content will be sent to the host when the setting code is

read; after reading the "do not send setting code" and setting is successful, the scanner will

no longer send the setting code content .

The default is "Do not send setting code"

send setting code   Do not send setting code

Restore factory Default

All scanners have a factory default setting. Reading the "Restore Factory Default" setting bar

code will make all the scanner's properties setting software default state.

Restore factory default

Instructions for use:

You are most likely to use this barcode in the following situations:

1. The scanner settings are incorrect, such as the barcode cannot be recognized.

2. You forgot what settings you made to the scanner before, and you don't want to use the

previous settings.

3. Set the scanner to use some infrequently used functions, and use it after completion.

Version number

Use the scanner to scan the version number barcode, you can view the current scanner

version number information,

version number

User default settings

In addition to the factory settings, users can also save their frequently used configuration as user default settings. By scanning "Save user default settings", the current configuration information of the device can be saved as user default settings. If there are already users Default setting information in the module, the new configuration information after this operation will replace the original user default setting information.

Save user default settings

recover user default settings

Example: Set the closed EAN-13 code as a user default setting.

Step 1: Scan the barcode of "Enable Setting Code";

Step 2: Scan the bar code "EAN-13 is prohibited";

Step 3: Scan the barcode of "Save User Default Settings";

Step 4: Scan the barcode of "disable Setting Code".

Sound settings

All tone settings

Turn on all sounds

Turn off all sounds

Power-on prompt sound

Turn on or turn off the beep sound when starting up

Turn on sound

Turn off sound

Setting code sound

scan setting code prompt sound on or off

Turn on the setting code sound

Turn off the setting code sound

Prompt sound for reading successful

Set the prompt sound on or off after reading code successful

Turn on sound for reading successful

Turn off sound for reading successful

Setting Sound volume for reading successful

Set the volume of the prompt sound for reading barcode successful

Low sound volume for reading successful

Middle sound volume for reading successful

High sound volume for reading successful

Read successful indicator

Setting reading success indicator light

Turn on reading successful indicator

Turn off reading successful indicator

Duration of the indicator light for reading barcode successful

Read the following setting codes, you can modify the LED prompt time, the default time is 200ms.

Modify the LED prompt time to 100ms

Modify the LED prompt time 200ms

Modify the LED prompt time to 500ms

Customize and modify LED prompt time

Example: Customize and modify the LED prompt time to 300ms, you can set it according to the following steps:

1. Scan the "Enable setting code" (you don't need to scan when it is turned on);

2. Scan the setting code of "Customize and Modify LED Prompt Time";

3. Scan the "3", "0" and "0" setting codes in turn in "Appendix-Data Code";

4. Scan the "Save" or Cancel setting code in Appendix-Save ;

5. Scan the "Disable Settings code" .

Lighting settings

Fill light illuminator

The illuminator can provide auxiliary lighting for shooting and reading, and the light beam illuminates the reading target to improve the reading performance and the ability to adapt to weak ambient light. The user can set it to one of the following states according to the application environment:

Turn on the fill light illuminator (default setting): The illuminator lights up during shooting and reading, and goes out at other times.

Illuminator lighting lamp is always on: The lighting lamp will continue to glow after the engine is turned on.

Turn off the fill light illuminator: the illuminator will not light up under any circumstances.

Turn on the fill light

Turn off the fill light

The fill light is always on

Aiming light

The aiming beam can help users find the best reading distance when shooting and reading.

Users can choose any of the following modes according to the application environment.

The aiming light is turned on by default, and it is blinking.

Turn on the aiming light (default setting): The aiming light flashes during shooting and

reading, and turn off at other times.

The aiming light is always on: After the reading engine is powered on, the aiming beam is

continuously reading

Turn off the aiming light: the aiming light will not light up under any circumstances.

Turn on the aiming light

Turn off the aiming light

Aiming light is always on

Data Format

Data input format

Auto*

GBK (GB2312)

UTF-8

Data output format

GBK code (notepad, Excel, etc.)

Unicode code (WORD, QQ, etc.)

Raw data output

Invoice function

Turn on/off the invoice function

Turn on the invoice function

Turn off the invoice function

Image recognition settings

Image inversion (reverse white) setting

Normal phase bar code: bar code with light background and dark bar

Inverted bar code: dark background, light bar code, also known as reverse white bar code,

reverse color bar code

Allow to read reverse color barcode

Prohibit reading reverse color barcode

Allows to read 1D reverse color barcodes

Prohibit reading 1D reverse color barcodes

Allow to read reverse color code of QR Code

Prohibit reading reverse color code of QR

Code

Allow to read Data Matrix reverse color code

Prohibit reading Data Matrix reverse color

code

Allow to read PDF 417 reverse color code   Prohibit reading PDF 417 reverse color code

NR is prompted if the barcode is not successfully read

Before releasing the trigger button, if the barcode cannot be read within the timeout period, it is allowed to send NR (No Read) message. Any feasible prefix or suffix can be attached to this message

Turn on NR

Turn off NR

Turn on NR: When the code reading is unsuccessful, the button will be released or the code reading timeout will send the unsuccessful code reading message (the default value is empty).

Turn off NR: When the code reading is unsuccessful, the message of unsuccessful code reading will not be sent.

Modify NR information

Read the following setting codes, and you will start to change the NR information. This setting code needs to be combined and configured with the data code. If you directly read the "save" of the data code, the length of the NR message will be "zero". In this case, even if the NR message is required to be sent, there will be no substantial information content. The output may cause confusion to the performance in use, please set it carefully.

The length of the NR information that can be set is 0~7 characters, and the character value range is 0~255.

Modify NR information

Example: Modify the NR information to the string "!ERR".

1. Check the character table to get the hexadecimal value corresponding to "!ERR": 21, 45, 52, 52;

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

3. Read "Modify NGR Information";

4. Read the data code "2", "1", "4", "5", "5", "2", "5", "2";

5. Read the data code "Save";

6. Read the "Disable Setting Code". (If you want to continue using, you can skip this step)

Chapter 2 Communication Settings

Introduction

When using this scanner to communicate with different hosts, you need to set the scanner to the corresponding communication interface mode. You can set the scanner's functions by scanning one or more setting bar codes. You can choose to use USB (USB-KBW, USB-COM), TTL, RS232 serial communication interface modes, etc.

USB keyboard interface

The USB keyboard interface is the USB-KBW interface. When the USB data line is connected, the scanner can be set to the USB-KBW input mode. In this mode, the scanner will become a virtual keyboard, and the data receiving host accepts the virtual keyboard input like a real keyboard input. The sending process after the scanner reads the code and obtains the data is to hit each key corresponding to the data in the virtual keyboard.

The default scanner uses USB-KBW communication, simulating USB keyboard input mode, no driver installation is required.

USB-KBW interface

National keyboard layout

The keyboard key arrangement, symbols, etc. corresponding to different national languages are not the same. The scanner can be virtualized into different national keyboard standards according to actual needs. The keyboard layout setting is applicable to the USB-KBW interface mode, and the default is "American English keyboard" .

US/China English (American English)

Germany (German)

United Kingdom (British English)

Spain (Spanish)

France (French)

Italy (Italian)

Portugal (Portuguese)

Brazil (Portuguese)

Belgium (Dutch)

Turkish-Q

USB transmission speed (delay between characters)

This parameter is used to adjust the delay time between scanner barcode characters. When the input host needs slower data transmission, scan the corresponding barcode below to increase the inter-character delay, which can adjust the transmission speed and improve the safety and integrity of output data .

Keyboard output character interval, range 0-75ms, default: 2ms

Default delay	No delay
Short delay	Long delay
Custom delay	

Example: To set the delay between characters to 15ms, you can set it according to the following steps:

1. Scan the "Enable Setting code (you don't need to scan when it is turned on);

2. Scan the "Custom Delay" setting code;

3. Scan the "1" and "5" setting codes in "Appendix-Data Code";

4. Scan the "Save" setting code in "Appendix-Save and Cancel Settings";

5. Scan the "Disable Settings code.

USB polling speed

The keyboard polling speed can be set to 1~10 ms by the following setting code. The

smaller the set value, the faster the reading module can send characters to the host. If the

host will lose characters, please increase the polling speed setting value.

Polling speed 1ms

Polling speed 2ms

Polling speed 3ms

Polling speed 4ms

Polling speed 5ms

Polling speed 度 6ms

Polling speed 7ms

Polling speed 8ms

Polling speed 9ms

Polling speed 10ms

USB-COM virtual serial interface

When the scanner uses a USB connection, and at the same time you want the host to receive

data through a serial port, you should use the USB virtual serial port. From the point of view

of the host system interface, the scanner is equivalent to connecting with the host through a

serial port. This function requires the corresponding driver to be installed on the host.

USB-COM

USB HID-POS interface

The USB HID-POS interface is recommended for new application software. Based on the HID

interface, no driver is required.

USB HID-POS

Protocol format

vid：0x26f1

pid：0x8803

Host send data format

Byte	content
0	Message ID (0x04)
1	Effective data length
2-61	data
62	0x00, 1 byte reserved
63	0x00 (no data behind) 0x01 (data behind)

Data format sent by scanning device to host

Byte	content
0	Message ID (0x02)
1	Effective data length
2-57	data
58-62	0x00, 5 bytes reserved
63	0x00 (no data behind) 0x01 (data behind)

TTL/RS232 serial interface

Serial communication interface is a common way to connect scanners and host devices, and can be used to connect to host devices such as PCs and POS machines. When the scanner uses the serial communication interface, the scanner and the host device must match the serial communication protocol parameter configuration completely to ensure the accuracy of the transmitted data.

The default communication protocol of the serial port: baud rate 9600, data bit 8 bits, check character NONE, stop bit 1 bit.

TTL/RS232

parameter	default
Serial communication type	Standard TTL/RS232
Baud Rate	9600
Parity Type	None
Data Bits	8
Stop Bits	1

Baud rate

The baud rate is the number of bits transmitted per second in serial data communication.

The baud rate used by the scanner and the data receiving host must be consistent to ensure

the accuracy of data transmission. The scanner supports the baud rates listed below in bit/s.

1200bps	2400bps
4800bps	9600bps*
19200bps	38400bps
57600bps	115200bps

Parity Type

Odd parity ODD

Even parity EVEN

NONE

Chapter 3 Reading Mode

Manual reading mode

Set to manual reading mode, press the button to start reading, and the reading will not stop when the button is released, the reading will stop if the reading is successful or the reading exceeds the single reading time.

Manual reading mode

Manual reading mode-single reading time

In the trigger mode, the longest shooting and reading time is allowed when the trigger level is maintained. After this time limit, no matter whether the reading is successful or not, the shooting and reading action will be stopped. The setting range of the single reading time is 1000~3600000ms, and the default time is 3000ms.

Quick setting of single reading time

Single reading time 3000MS

Single reading time 5000MS

Customize and modify the single reading time

Example: To set the limit time of a single code reading to 1500ms, you can set it according to the following steps:

1. Scan the "Enable Setting code (you don't need to scan when it is turned on);

2. Scan the setting code of "Customize and modify single reading time";

3. Scan the "1", "5", "0" and "0" setting codes in "Appendix-Data Code" in turn;

4. Scan the "Save" setting code in "Appendix-Save and Cancel Settings";

5. Scan the "Disable Settings code.

Manual reading mode-the same barcode reading delay

In order to avoid the same barcode being read multiple times in a short time in the trigger mode, you can request the reading module to delay the set time in this mode before allowing the same barcode to be read.

The same barcode reading delay means that after reading a barcode, within the set time, refuse to read the same barcode. Only after the duration has expired can it be read and output.

Set to "Reading the same barcode without delay", the same barcode will be output immediately after reading.

Set to "require the same bar code reading delay" and set "reread timeout without reset", which means that the same bar code can be read and transmitted after the timeout limit time after reading the same bar code.

Set to "require the same barcode reading delay" and set "reread timeout reset", which means that the same barcode will not be read and transmitted if it continues to read the same barcode within the limited time after reading.

If the same barcode delay is set to "modify the same barcode reading delay is unlimited", the same barcode will not be read repeatedly and will not be output without power failure.

No delay when reading the same barcode

Require the same barcode reading delay

Reread timeout does not reset

Reread timeout reset

Read the following setting codes, you can quickly modify the limit value of the same code reading delay time. The same code reading delay setting range is 0~65535ms, and the default duration is 1500ms. Custom modify the same code reading delay time

When modifying the same code reading

delay is unlimited

Modify the same code reading delay

1000ms

Modify the same code reading delay

1500ms

Modify the same code reading delay

3000ms

Modify the same code reading delay 5000ms

Custom modify the same code reading delay time

Example: Set custom and modify the same code reading delay time to 8000ms.

1. Scan the "Start Setting" setting code (you don't need to scan when it is turned on);

2. Scan the setting code of "Customize and modify single reading time";

3. Scan the "8", "0", "0" and "0" setting codes in "Appendix-Data Code" in turn;

4. Scan the "Save" setting code in "Appendix-Save and Cancel Settings";

5. Scan the "Close Settings" setting code.

Continuous reading mode

After setting, the scanner is in continuous scanning state, without triggering, the reading

engine starts to read the code immediately. When the reading is successful, the information

is output or the single reading time is over, the reading engine will wait for a period of time

(settable) and it will start automatically Read the code once. If the following conditions do

not occur, the scanning engine will work in cycles as described above: the user can also click

the trigger button to manually pause the code reading during the code reading process.

Click the trigger button to read the engine and continue to read the code cyclically.

Continuous reading mode

Continuous reading mode-single reading time

In the continuous mode, it refers to the maximum duration of continuous acquisition and

recognition before the reading is successful. After the timeout, it will enter the interval of no

acquisition and reading according to the setting. The setting range of the single reading

time is 1000~3600000ms, and the default time is 3000ms.

Quick setting of single reading time

Single reading time 3000MS

Single reading time 5000MS

Customize and modify the single reading time

Example: To set the limit time of a single code reading to 1500ms, you can set it according

to the following steps:

1. Scan the "Enable Setting" setting code (you don't need to scan when it is turned on);

2. Scan the setting code of "Customize and modify single reading time";

3. Scan the "1", "5", "0" and "0" setting codes in "Appendix-Data Code" in turn;

4. Scan the "Save" setting code in "Appendix-Save and Cancel Settings";

5. Scan the "Disable Settings" setting code.

Continuous reading mode-reading interval time

The reading interval is the time between two readings. Regardless of whether the reading is

successful or unsuccessful, there will be a set time interval between two readings, during

which no acquisition and reading will be performed. The setting range of the reading

interval is 0~65535ms, the default time is 1000ms

Modify the reading interval to 500ms

Modify the reading interval to 1000ms

Modify the reading interval to 2000ms

Modify the reading interval to 5000ms

Modify the reading interval to 0ms

Customize and modify the reading interval

Example: To set the reading interval to 800ms, you can set it according to the following steps:

1. Scan the "Enable Setting" setting code (you don't need to scan when it is turned on);

2. Scan the setting code of "Customize and modify the reading interval";

3. Scan the "8", "0" and "0" setting codes in "Appendix-Data Code" in turn;

4. Scan the "Save" setting code in "Appendix-Save and Cancel Settings";

5. Scan the "Disable Settings" setting code.

Continuous reading mode-the same barcode reading delay

In order to avoid the same bar code being read multiple times in a short period of time in the continuous reading mode, you can request the reading module to delay the set time in this mode before allowing the same bar code to be read.

The same barcode reading delay means that after reading a barcode, within the set time, refuse to read the same barcode. Only after the duration has expired can it be read and output.

Set to "Reading the same barcode without delay", the same barcode will be output immediately after reading.

Set to "require the same bar code reading delay" and set "reread timeout without reset",

which means that the same bar code can be read and transmitted after the timeout limit

time after reading the same bar code.

Set to "require the same barcode reading delay" and set "reread timeout reset", which

means that the same barcode will not be read and transmitted if it continues to read the

same barcode within the limited time after reading.

If the same barcode delay is set to "Modify the same barcode reading delay is unlimited",

the same barcode will not be read repeatedly and will not be output without power failure.

No delay when reading the same barcode

Require the same barcode reading delay

Reread timeout does not reset

Reread timeout reset

Read the following setting codes, you can quickly modify the limit value of the same code

reading delay time. The same code reading delay setting range is 0~65535ms, and the

default duration is 1500ms. Custom modify the same code reading delay time

When modifying the same code reading

delay is unlimited

Modify the same code reading delay

1000ms

Modify the same code reading delay

1500ms

Modify the same code reading delay

3000ms

Modify the same code reading delay

5000ms

Custom modify the same code reading

delay time

Example: Set custom modification of the same code reading delay time to 8000ms.

1. Scan the "Enable Setting" setting code (you don't need to scan when it is turned on);

2. Scan the setting code of "Customize and modify single reading time";

3. Scan the "8", "0", "0" and "0" setting codes in "Appendix-Data Code" in turn;

4. Scan the "Save" setting code in "Appendix-Save and Cancel Settings";

Scan the "Disable Settings" setting code.

Inductive / auto-sensing reading mode

In the auto-sensing mode, the reading module will monitor the captured images. When the scene changes, it will be read within the "single reading time" within a limited time. After the reading is successful, it will output information or time out, and then re-enter the monitoring The state of the scene change.

When the reading module works in this mode, it can also respond to the trigger level and enter the reading state. After the trigger level is cancelled, the reading is successful, or the timeout, it will re-enter the state of monitoring scene changes. Before entering the monitoring state again, the trigger level needs to be cancelled.

auto-sensing mode

Induction mode-single reading time limit

Single reading time limit: it is the longest time allowed to maintain the shooting and reading attempt after the scene change is monitored and the reading state is entered, and the reading is not successful. When this time is exceeded, the reading state will return to the monitoring state. The setting range of the single reading time is 1000~3600000ms, and the default time is 3000ms.

Modify the single reading time 3000ms   Modify the single reading time of 5000ms

Custom modify the limit of single reading time

Example: To set the limit time of a single code reading to 1500ms, you can set it according to the following steps:

1. Scan the "Enable Setting" setting code (you don't need to scan when it is turned on);

2. Scan the setting code of "Custom modify single reading time limit";

3. Scan the "1", "5", "0" and "0" setting codes in "Appendix-Data Code" in turn;

4. Scan the "Save" setting code in "Appendix-Save and Cancel Settings";

5. Scan the "Disable Settings" setting code.

Induction reading mode-same barcode reading delay

In order to avoid the same bar code being read multiple times in a short period of time in the induction reading mode, the reading module can be required to read the same bar code after a delay in this mode.

The same barcode reading delay means that after reading a barcode, within the set time, refuse to read the same barcode. Only after the duration has expired can it be read and output.

Set to "Reading the same barcode without delay", the same barcode will be output immediately after reading.

Set to "require the same bar code reading delay" and set "reread timeout without reset", which means that the same bar code can be read and transmitted after the timeout limit time after reading the same bar code.

Set to "require the same barcode reading delay" and set "reread timeout reset", which means that the same barcode will not be read and transmitted if it continues to read the same barcode within the limited time after reading.

If the same barcode delay is set to "modify the same barcode reading delay is unlimited", the same barcode will not be read repeatedly and will not be output without power failure.

No delay when reading the same barcode

Require the same barcode reading delay

Reread timeout does not reset

Reread timeout reset

Read the following setting codes, you can quickly modify the limit value of the same code reading delay time. The same code reading delay setting range is 0~65535ms, and the default duration is 1500ms. Custom modify the same code reading delay time

When modifying the same code reading

delay is unlimited

Modify the same code reading delay

1000ms

Modify the same code reading delay

1500ms

Modify the same code reading delay

3000ms

Modify the same code reading delay

5000ms

Custom modify the same code reading

delay time

Example: Set custom modification of the same code reading delay time to 8000ms.

1. Scan the "Enable Setting" setting code (you don't need to scan when it is turned on);

2. Scan the setting code of "Customize and modify single reading time";

3. Scan the "8", "0", "0" and "0" setting codes in "Appendix-Data Code" in turn;

4. Scan the "Save" setting code in "Appendix-Save and Cancel Settings";

5. Scan the "Disable Settings" setting code.

Induction mode-image stabilization time

In the induction mode, when the scanner stops reading the code, it will enter a process of re-adapting to the changes in the reading environment (image). After the image is stabilized, it will enter the induction state and wait for the barcode to appear. By modifying the image stabilization timeout, the time to adapt to the environment can be adjusted. The setting range of image stabilization time is 0~1600MS, and the default image stabilization time is 60MS.

The image stabilization time is 60ms

Image stabilization time 500ms

Image stabilization time 1000ms

Modify the image stabilization time

Example: Set the image stabilization time to 500MS.

1. Scan the "Enable Setting" setting code (you don't need to scan when it is turned on);

2. Scan the "modify image stabilization time" setting code;

3. Scan the "5", "0" and "0" setting codes in "Appendix-Data Code" in turn;

4. Scan the "Save" setting code in "Appendix-Save and Cancel Settings";

5. Scan the "Disable Settings" setting code.

Induction Mode-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.

Very high sensitivity

High sensitivity

Medium sensitivity

Low sensitivity

Chapter 4 Data Editing

Introduction

After the scanner successfully reads the code, the device obtains a string of data, which can be numbers, English, symbols, etc. In practical applications, we may not only need the data information of the bar code, or the data information contained in the bar code cannot meet your needs. For example, you may want to know which type of bar code this string of data information comes from, or attach special data to this string of data, which may not be included in the data information of the bar code.

Adding these content when making codes will inevitably increase the length of the bar code and is not flexible enough, which is not a recommended practice. At this time, we thought of artificially adding some content before or after the barcode data information, and these added content can be changed in real time according to needs, and you can choose to add or block. This is the prefix and suffix of the barcode data information. , Which not only satisfies the demand but does not need to modify the content of the barcode information.

Note: Data editing format: <Code ID><custom prefix><barcode data><custom suffix><terminator>

Code ID settings

Code ID prefix

In the process of using a scanner, you often need to know the type of barcode currently

scanned. We can use the Code ID prefix to identify the barcode type. Please refer to

"Appendix-Code ID" for the corresponding barcode type of Code ID.

The default is "Close Code ID".

Turn on Code ID

Turn off Code ID

Restore all barcode Code ID default values

Code ID prefix order

Code ID + custom prefix

Custom prefix + Code ID

Custom Code ID

The Code ID corresponding to each barcode type can be modified freely. The Code ID of all barcodes is 1 character and must be a letter, and cannot be set as a number, invisible character, or punctuation, etc.

The Code ID of each barcode type can be modified independently, it needs to be used by reading the corresponding setting code and combining with the data code.

Modify PDF417 Code ID

Modify Code128 Code ID

Modify QR Code ID

Modify DM Code ID

Modify EAN8 Code ID

Modify EAN13 Code ID

Modify UPCE0 Code ID

Modify UPCE1 Code ID

Modify UPCA Code ID

Modify IATA25 Code ID

Modify Code 39 Code ID

Modify Code 93 Code ID

Modify Interleaved 2 of 5 Code ID

Modify Codabar Code ID

Modify Industrial 25 Code ID

Modify Matrix 25 Code ID

Modify Code 11 Code ID

Modify MSI Plessey Code ID

Modify Micro QR Code ID

Modify Code32 Code ID

Modify ISBN Code ID

Modify ISSN Code ID

Example: Modify PDF417 Code ID to the letter 'p' Example:

1. Look up the table and get the hexadecimal value corresponding to "p" is 70;

2. Scan the "Enable Setting" setting code (you don't need to scan when it is turned on);

3. Scan the "modify PDF417 Code ID" setting code;

4. Scan the "7" and "0" setting codes in "Appendix-Data Code" in turn;

5. Scan the "Save" setting code in "Appendix-Save and Cancel Settings";

6. Scan the "Disable Settings" setting code.

User-defined prefix

Send user-defined prefix

If the user has set a custom prefix, the scanner needs to be set to transmit the custom prefix to transmit the user-defined prefix information. The default is "Do not transmit custom prefixes".

Send user-defined prefix

Do not transmit user-defined prefixes

User-defined prefix setting

Users can set custom prefixes for different barcode types according to the "**Appendix-Code ID**" information. Add up to 10 characters for the custom prefix.

Set custom prefix

Example: Add a custom prefix of XYZ to all barcode types

First, query the HEX value corresponding to XYZ as 58,59,5A.

Step 1: Scan the "Enable Settings" setting code (the default is not to scan);

Step 2: Scan the "Set custom prefix" setting code;

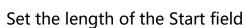Step 3: Scan "5", "8", "5", "9", "5", and "A" in "Appendix-Data Code" in turn.

Step 4: Scan "Appendix-Save or Cancel" the "Save" setting code.

Step 5: Scan the "Transfer Custom Prefix" setting code to complete the configuration.

User-defined suffix

Send user-defined suffix

If the user has set a custom suffix, the scanner needs to be set to transmit the custom suffix

to transmit the user-defined suffix information. The default is "Do not transmit custom

suffixes".

Send user-defined suffix

Do not transmit user-defined suffixes

User-defined suffix setting

Users can set custom suffixes for different barcode types according to the "Appendix-Code

ID" information. Add up to 10 characters for the custom suffix.

Set custom suffix

Example: Add a custom suffix of XYZ to all barcode types

First, the HEX corresponding to XYZ is only 58,59,5A by querying.

Step 1: Scan the "Enable Settings" setting code (the default is not to scan);

Step 2: Scan the "Custom Suffix" setting code;

Step 3: Scan "5", "8", "5", "9", "5", and "A" in "Appendix-Data Code" in turn.

Step 4: Scan "Appendix-Save or Cancel" the "Save" setting code.

Step 5: Scan the "Transfer custom suffix" setting code to complete the configuration.

Hidden characters

Step 1: Set the field length

Set the length of the Start field

Set the length of End field

Note: The length of the field is in bytes (1 byte for English characters and 2 bytes for Chinese characters), using hexadecimal data for configuration. The length modification range is 0-255.

Example: Set the length of the Start field to 4 (hexadecimal 0x04) and the length of the End field to 12 (hexadecimal 0x0C).

Step 1: Scan the "Startup Settings" setting code (it is not necessary to scan when it is turned on by default);

Step 2: Scan the "Set Start field length" setting code;

Step 3: Scan the number "0" "4" of "Appendix-Data Code" to set the code;

Step 4: Scan the "Save" setting code of "Appendix-Save and Cancel Settings".

Step 5: Scan the "Set End Field Length" setting code;

Step 6: Scan the "Appendix-Data Code" number "0" "C" setting code in turn;

Step 7: Scan the "Save" setting code of "Appendix-Save and Cancel Settings".

Step 2: Set the transmission field

Transfer complete Data field

Only the Start field is transmitted

Only transfer the Center field

Only the End field is transmitted

Example: After setting the complete Data barcode "12345678901234567890", the length of the Start field is 4 and the length of the End field is 12:

Set "Transfer Complete Data Field" and the output result is: 12345678901234567890

Set "only transfer Start field" output result is: 1234

Set "only transfer Center field" output result is: 5678

Set "Transfer End Field Only" and the output result is: 901234567890

End character setting

The terminator suffix is used to mark the end of a complete data message. The terminator suffix must be the last content when a piece of data is sent, and there will be no additional data after that.

Allow ending character

No terminator is allowed

Add CR

Add CR+LF

Custom end suffix

Read the "modify end character" and combine to read the data code to modify the

character content of the end character.

When modifying end character, use 2 hexadecimal values to represent the characters, and

read 2 or 4 values sequentially to represent 1 character or 2 characters. For the hexadecimal

conversion of characters, please refer to "**Appendix-ASCII Code Table**".

modify end character

Example: Modify the ending character to the letter 0x0D

1. Scan the "Start Setting" setting code (you don't need to scan when it is turned on);

2. Scan the "modify end character" setting code;

3. Scan the "0" and "D" setting codes in "Appendix-Data Code" in turn;

4. Scan the "Save" setting code in "Appendix-Save and Cancel Settings";

5. Scan the "Close Settings" setting code.

Chapter 5 Barcode Parameter Setting

Introduction

Each type of barcode has its own unique attributes, and the scanner can be adjusted to adapt to these attribute changes through the setting codes in this chapter. The fewer barcode types that enable "Allow Reading", the faster the scanning speed of the scanner. You can prevent the scanner from reading unused barcode types to improve the scanner's working performance.

Global Settings

Turn on/off all barcodes

Turn on all barcodes

Turn off all barcodes

Turn on/off all 1D barcodes

Turn on all 1D barcodes

Turn off all 1D barcodes

Turn on/off all 2D barcodes

Turn on all 2D barcodes

Turn off all 2D barcodes

UPC-A

Allow/prohibit reading UPC-A

Allow reading UPC-A

Prohibit reading UPC-A

Send check character

The UPC-A barcode data is fixed to 12 characters, and the 12th digit is the check character, which is used to verify the correctness of all 12 characters. The default is to transmit the check character.

Send check character

Do not transmit check characters

Transmission system characters

The first digit of UPC-A barcode is a system character, and its value is fixed as "0"

Transmission system characters

Do not transmit system characters

2/5 additional bits

Additional digits refer to the 2 or 5 digital barcodes appended to the normal barcode, as shown in the figure below. The blue line frame on the left is the normal barcode, and the red line frame on the right is the additional digit. The default is to turn off the extra bit.

Turn on 2 additional bits

Turn off 2 additional bits

Turn on 5 additional bits

Turn off 5 additional bits

Convert UPC-A to EAN-13

Barcode information conversion

Barcode information is not converted

UPC-E

Allow/prohibit reading UPC-E0

Allow reading UPC-E0

Prohibit reading UPC-E0

Send check character

UPC-E0 barcode data is fixed to 8 characters, the 8th digit is a check character, used to verify the correctness of all 8 characters, the default is to transmit a check character.

Send check character

Do not transmit check characters

Transmission system characters

Transmission system characters

Do not transmit system characters

Allow/prohibit reading UPC-E1

Allow reading UPC-E1   Prohibit reading UPC-E1

Send check character

UPC-E1 barcode data is fixed to 8 characters, and the 8th digit is a check character, which is used to verify the correctness of all 8 characters. The default is to transmit a check character.

Send check character   Do not transmit check characters

Transmission system characters

Transmission system characters   Do not transmit system characters

2/5 additional bits

Additional digits refer to the 2 or 5 digital barcodes appended to the normal barcode, as shown in the figure below. The blue line frame on the left is the normal barcode, and the red line frame on the right is the additional digit. The default is to turn off the extra bit.

Open 2 additional bits

Turn off 2 additional bits

Open 5-digit additional bit code

Turn off 5 additional bits

EAN-8

Allow/prohibit reading EAN-8

Allow to read EAN-8   Prohibit reading EAN-8

Send check character

The EAN-8 barcode data is fixed to 8 characters, and the 8th digit is the check character,

which is used to verify the correctness of all 8 characters. The default is to transmit the check

character.

Send check character   Do not transmit check characters

2/5 additional bits

Additional digits refer to the 2 or 5 digital barcodes appended to the normal barcode, as shown in the figure below. The blue line frame on the left is the normal barcode, and the red line frame on the right is the additional digit. The default is to turn off the extra bit.

Open 2 additional bits

Turn off 2 additional bits

Open 5-digit additional bit code

Turn off 5 additional bits

EAN-13

Allow/prohibit reading EAN-13

Allow reading EAN-13

Prohibit reading EAN-13

Send check character

The EAN-13 barcode data is fixed to 13 characters, and the 13th digit is the check character, which is used to verify the correctness of all 13 characters. The default is to transmit the check character.

Send check character

Do not transmit check characters

2/5 additional bits

Additional digits refer to the 2 or 5 digital barcodes appended to the normal barcode, as shown in the figure below. The blue line frame on the left is the normal barcode, and the red line frame on the right is the additional digit. The default is to turn off the extra bit.

Open 2 additional bits

Turn off 2 additional bits

Open 5-digit additional bit code

Turn off 5 additional bits

Convert to ISBN

Barcode information conversion

Barcode information is not converted

Convert to ISSN

Barcode information conversion

Barcode information is not converted

Code 128

Allow/prohibit reading Code 128

Allow to read Code 128

Prohibit reading Code 128

Code 39

Allow/prohibit reading Code 39

Allow to read Code 39

Prohibit reading Code 39

Check character setting

Code 39 barcode data is not mandatory to include a check character. If there is a check

character, it is the last character of the data. The check character is a value calculated based

on all data to check whether the data is correct. You can turn on or off the check according

to your needs, and set whether to send check characters.

Do not send verification

Check and send verification

Verify but do not transmit verification

Transmission start character and end character

Code 39 barcode data has a character "*" before and after it is used as the start

character and stop character. You can set whether to transmit the start character and

stop character together with the barcode data after the barcode is successfully read.

Transmission start character and end

character

Do not transmit start and end characters

Full ASCII recognition range

Code 39 code data can include all ASCII characters, but the scanner only reads part of ASCII

characters by default. By setting, you can turn on the function of reading complete ASCII

characters

The default is "Do not recognize full ASCII characters"

Recognize full ASCII characters

Does not recognize full ASCII characters

Code 32

Allow/prohibit reading Code 32

Code 32, Code 32 Pharmaceutical, is a form of Code 39 barcode used by Italian pharmacies.

This bar code is also called PARAF.

The output format of Code 32 is: The output format is: * + A + 8 digits + 1 digit check + *.

Allow to read Code 32   Prohibit reading Code 32

Note: Code 32 is converted from Code39 to Code32. When Code32 is turned on, Code 39

will be affected. It can be read only when Code39 is enabled and without verification, and

Code 32 can be read without verification. .

Code 93

Allow/prohibit reading Code 93

Allow to read Code 93

Prohibit reading Code 93

Codabar (NW-7)

Allow/prohibit reading Codabar

Allow reading Codabar

Prohibit reading Codabar

Check digit setting

No verification

Modulo 10 verification and transmission

verification

Modulo 10 verification and no verification

Modulo 16 verification and transmission

verification

Modulus 16 verification and no verification

Start character and stop character setting

Codabar start and end characters are allowed to be one of the four characters "A", "B", "C",

and "D"; the terminator is also allowed to be "T", "N", "*", " E" one of these four characters.

The start and end characters are not transmitted by default

Do not transmit start and end characters

Start and end characters ABCD/ABCD

Start and end ABCD/TN*E

Start and end abcd/abcd

Start and end abcd/tn*e

Interleaved 2 of 5

Allow/Prohibit   Interleaved 2 of 5

Allow to read Interleaved 2 of 5*

Prohibit reading Interleaved 2 of 5

Check character setting

Interleaved 2 of 5 barcode data is not mandatory to include a check character. If there is a check character, it is the last character of the data. The check character is a value calculated based on all data to check whether the data is correct. You can turn on or off the check according to your needs, and set whether to send check characters.

The code digits of Interleaved 2 of 5 barcodes must be even, the check character is included in the code, if it is odd, the first digit must be 0. Check character Check character is a code

No verification

USS verification and transmission

verification

USS verification does not transmit

verification

Matrix 2 of 5

Allow/ Prohibit read Matrix 2 of 5

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

Check character setting

Matrix 2 of 5 barcode data is not mandatory to include a check character. If there is a check

character, it must be the last byte of the data. The check character is a value calculated from

all data except the check character to verify whether the data is correct.

No verification

Check and send verification   Verify but do not transmit verification

Industrial 2 of 5

Allow/prohibit reading Industrial 2 of 5

Allow to read Industrial 2 of 5   Prohibit reading Industrial 2 of 5

Check character setting

Industrial 2 of 5 barcode data does not compulsorily include a check character. If there is a

check character, it must be the last byte of the data. The check character is a value

calculated from all data except the check character, used to check whether the data is

correct.

No verification*

Check and send verification   Verify but do not transmit verification

Standard 2 of 5(IATA)

Allow/prohibit reading Standard 2 of 5

Allow to read Standard 2 of 5

Prohibit reading Standard 2 of 5

Check character setting

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

No verification

Check and send verification

Verify but do not transmit verification

Code 11

Allow/prohibit reading Code 11

Allow to read Code 11

Prohibit reading Code 11

MSI Plessey

Allow/Prohibit reading MSI Plessey

Allow to read MSI Plessey

Prohibit reading MSI Plessey

QR Code

Allow/ Prohibit reading QR Code

Allow to read QR Code

Prohibit reading QR Code

Micro QR Code

Allow/prohibit reading Micro QR Code

Allow to read Micro QR Code

Prohibit reading Micro QR Code

Data Matrix

Allow/prohibit reading Data Matrix

Allow to read Data Matrix

Prohibit reading Data Matrix

PDF 417

Allow/Prohibit PDF 417

Allow to read PDF 417

Prohibit reading PDF 417

Chapter 6 Appendix

Appendix-Data Code

0

1

2

3

4

5

6

7

8

9

A

B

C

D

E

F

Appendix-save and cancel settings

After reading the data code, you must read the save code to save the read data. If an error

occurs when reading the data code, you can cancel reading the wrong data in addition to

resetting.

For example, read a certain setting code and read the data "1", "2", and "3" in turn. At this

time, if you read "cancel the previous data read", the last read number "3" will be cancelled ,

If you read "Cancel a string of data previously read", the read data "123" will be canceled; if

you read "Cancel current setting", it will cancel the setting code together.

Save Settings

Cancel the previous data read

Cancel a string of data previously read

Cancel current setting

Appendix-Default Setting Table

Parameter name	Default setting	Remark
Comprehensive settings		
Setting code function	ON	默认开启
Send setting code	OFF	
All tones	ON	
Power-on prompt	ON	
Setup code prompt tone	ON	
Prompt for successful reading	ON	
Volume of prompt tone for successful barcode reading	high	
Reading success indicator light	ON	
Duration of the indicator light for successful barcode reading	ON	200ms
Fill light	ON	
Aiming light	ON	
Aiming light flashes	ON	
Data input format	Auto	
Data output format	GBK	
Invoice function	OFF	
Image inversion	OFF	

Prompt for unsuccessful reading	OFF
Communication settings	
Interface mode	USB-KBW
Inter-character delay	2MS
USB polling speed	1MS
Keyboard mode	American English
Control character escape	OFF
Baud rate	9600
Serial verification	No verification
Data bit	8 位
Stop bit	1 位
Reading mode	
Reading mode	Manual reading
Manual reading mode-single reading time	3S
Manual reading mode-the same barcode reading delay	No delay
Continuous reading mode-single reading time	3S
Continuous reading mode-reading interval time	1000MS
Continuous reading mode-the	No delay

same barcode reading delay		
Induction reading mode-single reading time	3S	
Induction reading mode-image stabilization time	60MS	
Induction reading mode-induction sensitivity	High sensitivity	
Data editing		
Send Code ID	OFF	
Code ID prefix	Code ID+ Custom prefix	
Send custom prefix	OFF	
Send custom suffix	OFF	
Hide header data	OFF	
Hide central data	OFF	
Hide tail data	OFF	
Allow terminator	ON	
Terminator	ON	CR
Barcode parameter setting		
Turn on all barcodes	OFF	
Turn on all 1D barcodes	OFF	
Turn on all QR codes	OFF	
UPC-A		

Allow reading	ON
Send check character	ON
Transmission system characters	ON
Read 2 additional bits	OFF
Read 5 additional bits	OFF
Convert to EAN-13	OFF
UPC-E	
Allow reading UPC-E0	ON
UPC-E0 transmission system character	ON
Allow reading UPC-E1	ON
Send check character	ON
UPC-E1 transmission system characters	ON
Read 2 additional bits	OFF
Read 5 additional bits	OFF
Mandatory additional bits, 2 bits allowed	OFF
Mandatory additional bits, 5 bits allowed	OFF
EAN-8	
Allow reading	ON

Send check character	ON
Read 2 additional bits	OFF
Read 5 additional bits	OFF
EAN-13	
Allow reading	ON
Send check character	ON
Read 2 additional bits	OFF
Read 5 additional bits	OFF
Convert to ISBN	OFF
Convert to ISSN	OFF
Code 128	
Allow reading	ON
Code 39	
Allow reading	ON
Turn on verification	OFF
Transmission check	OFF
Transmission start character and end character	OFF
Recognize Full ASCII	OFF
Code 32	
Allow reading	OFF
Code 93	

Allow reading	OFF
Turn on verification	OFF
Transmission check	OFF
Codabar	
Allow reading	ON
Turn on verification	OFF
Transmission check	OFF
Transmission start character and end character	OFF
Start and stop format	ABCD/ABCD
Interleaved 2 of 5	
Allow reading	ON
Turn on verification	OFF
Transmission check	OFF
Matrix 2 of 5	
Allow reading	OFF
Turn on verification	OFF
Transmission check	OFF
Industrial 2 of 5	
Allow reading	OFF
Turn on verification	OFF
Transmission check	OFF

Standard 2 of 5	
Allow reading	OFF
Turn on verification	OFF
Transmission check	OFF
Code 11	
Allow reading	OFF
MSI Plessey	
Allow reading	OFF
QR Code	
Allow reading	ON
Micro QR Code	
Allow reading	ON
Data Matrix	
Allow reading	ON
PDF 417	
Allow reading	ON

Appendix-Code ID

No.	Barcode type	Code ID code
1	UPC-A, UPC-E	c
2	EAN-8, EAN-13,ISBN,ISSN	d
3	CODE 39, Code 32	b
4	Codabar	a
5	Code 128	j
6	Code 93	i
7	Interleaved 2 of 5	e
8	Matrix 2 of 5	v
9	Industrial 2 of 5	D
10	Standard 2 of 5 (IATA25)	s
11	PDF 417	r
12	DataMatrix	u
13	QR Code, Micro QR	Q
14	Code 11	H
15	MSI Plessey	J

Appendix-ASCII code table

Note: ASCII code table 0-31 are invisible characters used as control characters, and 32-127 are visible characters

Hexadecimal	ASCII value (decimal)	character
00	00	NUL (Null char.)
01	01	SOH (Start of Header)
02	02	STX (Start of Text)
03	03	ETX (End of Text)
04	04	EOT (End of Transmission)
05	05	ENQ (Enquiry)
06	06	ACK (Acknowledgment)
07	07	BEL (Bell)
08	08	BS (Backspace)
09	09	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)