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# OCBS-2099 User Manual

V-1.0.3

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# 1 BASIC INFORMATION

## 1.1 About the Manual

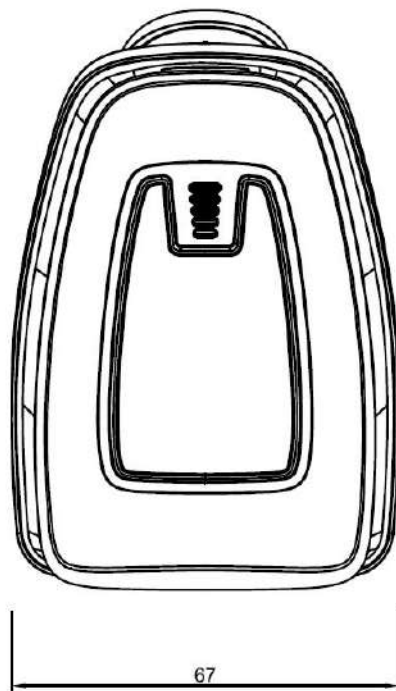
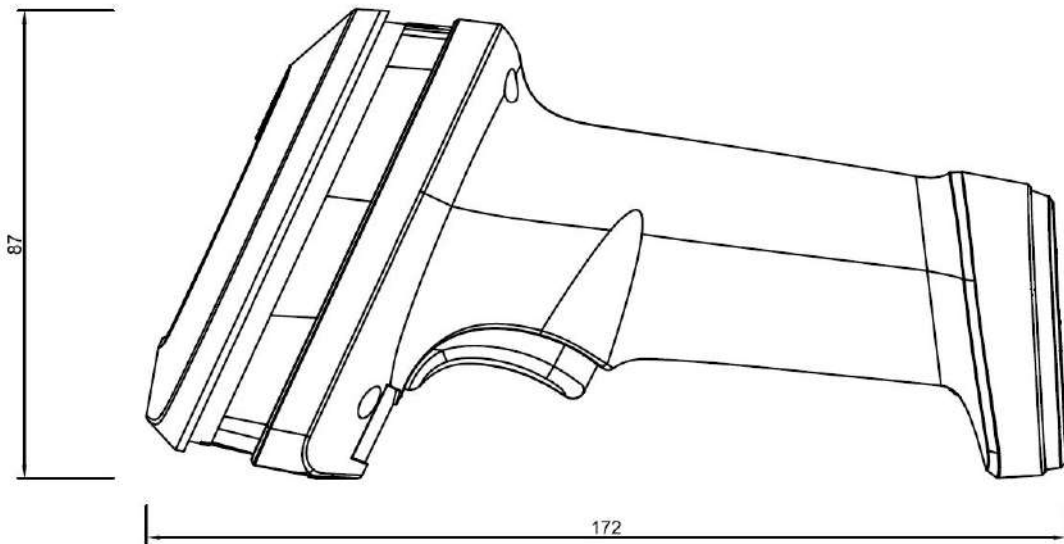
This user manual includes interface mode settings, function settings (lighting, keyboard type and factory reset, etc.), symbology settings, exposure optimization in special scenes, and data format editing functions. If you need to change the function you need, scan the corresponding configuration code below. All bands (\*) indicate factory default values.

## 1.2 Package Details

Item	Specification/Model	Number	Remark
Barcode scanner	OCBS-2099	1	
Data Cable	USB or RS232	1	Option
Quick User Manual	Paper	1	

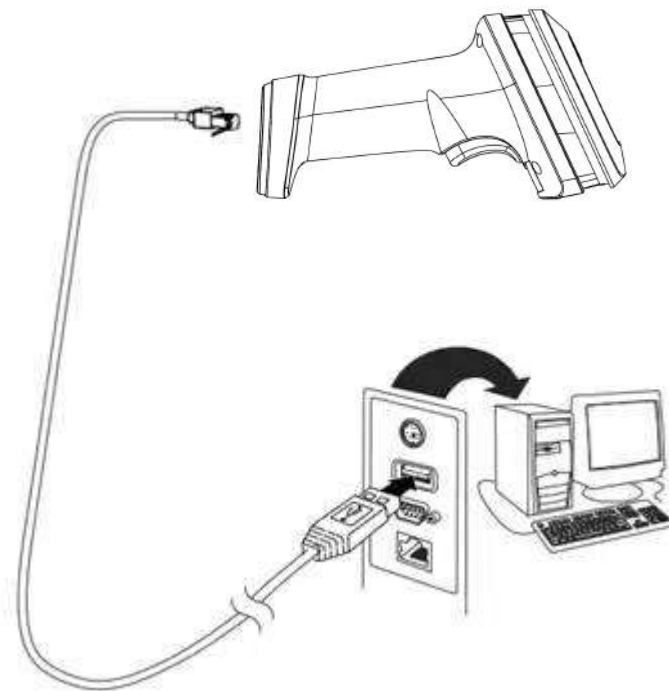


### 1.3 Appearance Size



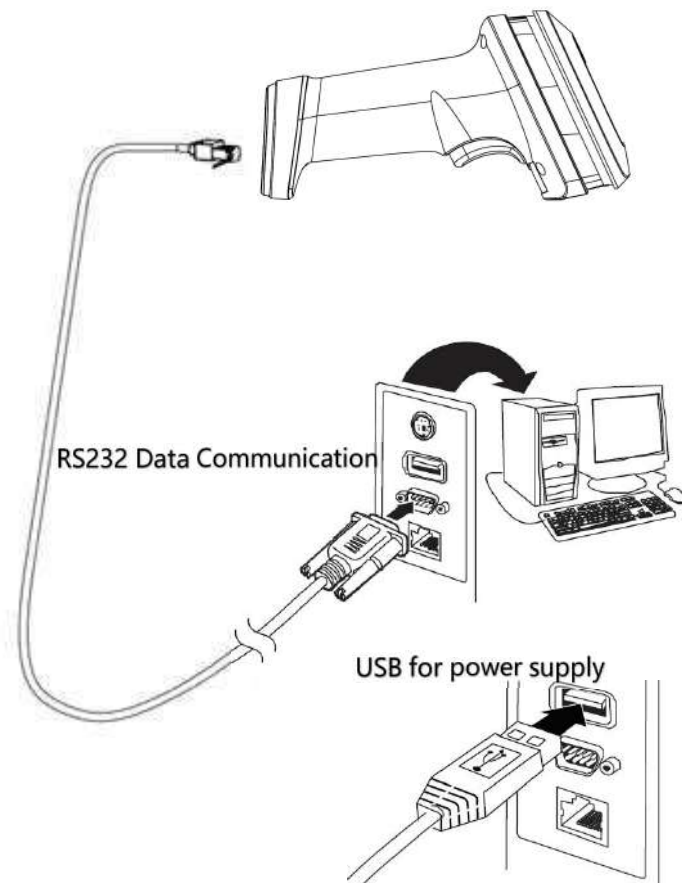
## 1.4 Interface

### 1.4.1 USB Cable Connection



1. Insert the RJ45 interface (crystal head) of the USB data cable into the rear of the scanner, there is a crisp "click" sound, and the connection is normal.
2. Connect the USB interface of the USB data cable to the host device.

## 1.4.2 RS232 Cable Connection



1. Insert the RJ45 interface (crystal head) of the data cable into the end of the scanner, there is a crisp "click" sound, and the connection is normal.
2. Connect the data cable DB9-pin serial port to the host device.
3. Connect the USB port on the auxiliary line to the host or 5V power adapter port (such as a mobile phone charger).

## **1.5 Decoding**

1. Make sure that both ends of the cable are properly connected to the scanner and the host, and there is a prompt sound when starting.
2. Press the button, the fill light of window is on, accompanied by a green dot.
3. Aim the green dot at the barcode. After the reading is successful, the scanner will sound a beep, and turn off the fill light and aiming light. After the data is transmitted to the host, press the switch again to read the barcode.
4. In the process of reading barcode, the different sizes and density of the barcode, the effective reading distances are also different. When there is difficulty in reading, the scanner can be moved back and forth, adjust the distance between the scanner and the barcode to improve the success rate of reading.

## 2 System Settings

### 2.1 Factory Default

Read the "Factory Default" barcode will restore all the properties of the scanner to the factory state. You are most likely to use this barcode when:

- a. Scanner setting are incorrect. Eg: barcode cannot be read.
- b. You forgot what setting you made on the scanner.
- c. The interface mode will not be modified, if you need to change it, please set it separately.



### 2.2 Check the Version Number

Read the "Version Information" barcode, the scanner will output software version.



### 2.3 Save the User Default Setting

In addition to the factory default setting, you can save the setting you use frequently as user default setting.



FFF67B

**Save User Configuration**

### 2.4 Recover the User Default Setting

Restore the system setting state to the last saved user default setting state. The scanner will restart automatically after setting.



FFF67A

**Restore User Configuration**

## 2.5 Interface Mode

### 2.5.1 USB HID Interface

When the data cable with USB interface, after read the "USB HID" barcode, scanner will be set to the "USB Keyboard" mode, and the scanner will input data to the host by pressing the keyboard button first.



**Note:** When the data output is wrong, please turn off the third-party output method and use the American English keyboard, because the third-party input method will edit the input data for a second time before outputting, and the data output will be incomplete, wrong or garbled.

#### 2.5.1.1 USB Transmission Rate

The USB Transmission Rate can be set to three levels: high, medium, and low. The higher the rate, the faster the characters are transmitted to the host.



### 2.5.1.2 USB Transmission Delay

The USB Transmission Delay can be set to four gears from 0 to 3. If the host will lose characters, the delay can be increased.



A788B0

USB Transmission Delay-0ms



A788B1

USB Transmission Delay-1ms



A788B2

USB Transmission Delay-2ms



A788B3

USB Transmission Delay-3ms

### 2.5.1.3 Emulate Keyboard

When the emulate keyboard input character is enabled, the character will be sent through the numeric keypad, ignoring the national keyboard layout setting;

Assume that the current scanner reads the barcode with the content "A&F" (the decimal value in Code Page 1252 is 65/167/66 respectively).

If the keyboard emulation input character is set to "on", the scanner emulates the keyboard operation as follows:

Enter "A" -- press the ALT key, simultaneously press the numeric keypad keys 0, 6, 5 in sequence, and release the ALT key;

Enter "&" -- press the ALT key, simultaneously press the numeric keypad keys 1, 6, 7 in sequence, and release the ALT key;

Enter "B" - press the ALT key, simultaneously press the numeric keypad keys 0, 6, 6 in sequence, and release the ALT key.



A6A761

**Enable**



A6A760

**Disable**



A6A771

**Enable the emulate keyboard front zero**



A6A770

**Disable the emulate keyboard front zero**



### 2.5.1.4 Keyboard Language Country Type

When the barcode scanner is used as a keyboard input device by default, some characters are different in different countries, and different national languages need to be set. The keyboard defaults to the US language.



A69E60  
Belgium



A69E61  
United Kingdom



A69E62  
France



A69E63  
German



A69E64  
Italy



A69E65  
Spain



A69E66  
\*America



A69E68  
Singapore



A69E69  
El Salvador



A69E610  
Japan



A69E611  
Sierra Leone



A69E612  
Turkey



A69E614  
Hungary



A69E616  
Thailand



A69E617  
Vietnam



A69E622  
The Czech Republic



A69E623  
Slovakia



A69E624  
Russia(CP866)



A69E626  
Arabic



A69E627  
Portugal BRAZ\_ABNT--Brazil



A69E628  
Swiss GERMAN\_QWERTZ--German keyboard



A69E630  
Swiss FRENCH\_QWERTZ French keyboard



A69E631  
Portugal

### 2.5.1.5 Keyboard Mode Encoding Format

The keyboard mode can output Chinese, traditional Chinese, Korean, etc. Since the third-party software uses different encoding, the scanner needs to switch to different encoding formats, please scan the corresponding configuration code as required.



A67960  
\*Default



A67961  
For "writing board, Word"



A67962  
For "Notepad, Excel, WPS"



A7B7C1  
BIG5(Traditional Chinese)



A7B7C0  
Disable BIG5(Traditional Chinese)



A67963  
GBK



A67964  
UTF-8



A67965  
JIS



A67966  
CP949  
Word Output Korean



A67967  
Notepad Output Korean

### 2.5.1.6 Ctrl+X Mode Send

After this function is enabled, the control characters from 00 to 1F in the ASCII code table will be output by the combination of CTRL+X.

For the corresponding relationship between the specific ASCII value and the control function keys, see the attached table.



ABF771

Enable



ABF770

Disable

Non-printable			Keyboard Control + ASCII (CTRL+X) Mode		
DEC	HEX	Char	Control + X Mode Off	Windows Mode Control + X Mode On	
				CTRL + X	CTRL + X function
0	00	NUL	NULL	CTRL+ @	
1	01	SOH	NP Enter	CTRL+ A	Select all
2	02	STX	Caps Lock	CTRL+ B	Bold
3	03	ETX	Right Arrow	CTRL+ C	Copy
4	04	EOT	Up Arrow	CTRL+ D	Bookmark
5	05	ENQ	NULL	CTRL+ E	Center
6	06	ACK	NULL	CTRL+ F	Find
7	07	BEL	Enter	CTRL+ G	
8	08	BS	Left Arrow	CTRL+ H	History
9	09	HT	Tab	CTRL+ I	Italic
10	0A	LF	Down Arrow	CTRL+ J	Justify
11	0B	VT	Tab	CTRL+ K	hyperlink
12	0C	FF	Backspace	CTRL+ L	list, left align
13	0D	CR	Enter / Ret	CTRL+ M	
14	0E	SO	Insert	CTRL+ N	New
15	0F	SI	ESC	CTRL+ O	Open
16	10	DLE	F11	CTRL+ P	Print
17	11	DC1	Home	CTRL+ Q	Quit
18	12	DC2	PrtScn	CTRL+ R	
19	13	DC3	Delete	CTRL+ S	Save
20	14	DC4	Tab+shift	CTRL+ T	
21	15	NAK	F12	CTRL+ U	
22	16	SYN	F1	CTRL+ V	Paste
23	17	ETB	F2	CTRL+ W	
24	18	CAN	F3	CTRL+ X	
25	19	EM	F4	CTRL+ Y	
26	1A	SUB	F5	CTRL+ Z	
27	1B	ESC	F6	CTRL+ [	
28	1C	FS	F7	CTRL+ \	
29	1D	GS	F8	CTRL+ ]	
30	1E	RS	F9	CTRL+ ^	
31	1F	US	F10	CTRL+ -	
127	7F	DEL	Delete		

## 2.5.2 USB COM Interface

After the scanner of the USB interface is set to "USB COM", the data will be transmitted to the host through the serial port;



### 2.5.3 RS232 Interface Setting

RS-232 is also called serial communication. After the scanner is connected to the host using a serial cable, both parties need to set the same communication protocol parameters to communicate normally.

Parameter Name	Default
Baud Rate	9600
Data Digit	8
Stop Digit	1
Check Digit	None
Hardware Flow Control	None



FFBFFF  
RS 232(TTL 232)



### 2.5.3.1 RS232 Baud Rate

The baud rate is the number of digits transmitted per second in serial port 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. Default: 9600bps.



7BEA61  
300



7BEA62  
1200



7BEA64  
4800



7BEA67  
19200



7BEA69  
57600



7BEA60  
600



7BEA63  
2400



7BEA65  
\*9600



7BEA68  
38400



7BEA610  
115200

### 2.5.3.2 Data Digit

Can choose to transmit 7 or 8 digits of data, please make sure that the data digits of the scanner are consistent with those of the data receiving host.



7C6790  
7 Digits



7C6791  
\*8 Digits

### 2.5.3.3 Stop Digit

The stop digit is located at the last part of each byte transmitted, and is used to mark the completion of the transmission of this byte to start receiving the next byte of data.

1 stop digit is set by default. If you need to stop for a long time, you can set 2 stop digits.



7C67A0  
2 digits



7C67A1  
\*1 digit

### 2.5.3.4 Check Digit Setting

The scanner can choose different parity check character types in the process of using the serial port transmission, but it must be consistent with the parity check character type of the host.



7C69B2  
O (Odd check)



7C69B1  
S (Fixed value 0)



7C69B0  
E (Even check)



7C69B3  
M (Fixed value 1)



7C69B4  
\*N (No check)

### 2.5.3.5 Serial Port Encoding Output Format



A6C8A2  
Serial Port Output UTF-8



A6C8A1  
Serial Output NOT UTF-8



A7C961  
Serial Port OutputCP932



A7C960  
\*Serial Output Chinese



A6C8A0  
Serial Port Output according to Barcode Content

## 2.6 Working Mode

In this section, you can change the reading mode of the device, you only need to scan the corresponding setting code according to your needs.

### 2.6.1 Reading Mode

#### Manual Mode



7E9AA2  
**\*Manual Mode**

**Automatic mode:** After power on, it has been in the state of reading codes. Pressing and releasing the button can briefly switch the scanner between manual and automatic states. In this mode, the reread delay can be used to prevent the same barcode from being read multiple times.



7E9AA0  
**Automatic Mode**

**Reading mode:** When the button is pressed, the scanner starts to read barcode, and it stops reading barcode until the button is released. When the key is pressed and the code is successfully read, there will be a prompt tone and the barcode information will be output. As long as the key is not released, the scanner will continue to read barcode. The same barcode is only allowed to be read and output once while the key is pressed.



7E9AA3  
**Reading Mode**

**Pulse Mode:** When the button is pressed, the scanner starts to read barcode, and stops reading barcode until barcode reading is successful or the set time of a code reading timeout is reached. In this mode, a barcode reading timeout starts from the time the button is released.



7E9AA6  
**Pulse Mode**

**Induction Mode:** The scanner enters the induction mode, which can be used with a stand. When an object passes through the scanning window, the scanner will be awakened, the fill light will be lit, and the code will be read. When the decoding time is exceeded, the fill light is turned off.



7E9AA8  
**Induction Mode**

## 2.6.2 The Same Barcode Delay

The same barcode delay only takes effect in automatic mode. After reading a barcode in automatic mode, it will refuse to read the same barcode within the set time period. It can be read and output only after the time period is exceeded.

The same barcode time can be set to 1~127 (min. is 1, max. is 127), can be edited freely with barcode software, choose to use CODE128 code. "7EFD6X" (X means the same barcode interval time, 1 means 50ms, 127 means 127\*50ms ).



7EFD61  
50ms



7EFD62  
100ms



7EFD63  
150ms



7EFD64  
200ms



7EFD65  
250ms



7EFD66  
300ms



7EFD610  
500ms



7EFD615  
\*750ms

### 2.6.3 Barcode Reading Timeout



B6AE610  
15 S



B6AE620  
30 S



B6AE640  
60 S



B6AE680  
120 S



B6AE6120  
180 S



B6AE6200  
200 S

## 2.7 Light Setting

### 2.7.1 Position Light



B66771  
\*Enable



B66770  
Disable

### 2.7.2 Filling Light



B66781  
\*Enable



B66780  
Disable

### 2.7.3 Indicator



B66890  
\*Normal



B66891  
Backwards



B66892  
Always OFF



B66893  
Always ON



## 2.8 Beeper Setting



B667D0  
\*Enable



B667D1  
Disable

### 2.8.1 Beeper Lasting Time



7EA7A0  
Normal



7EA7A1  
Short

## 2.8.2 Beeper Frequency Setting



7EB9B7  
\*2.7KHz



7EB9B5  
2.0KHz



7EB9B3  
3.1KHz



7EB9B1  
4.2KHz



7EB9B6  
1.6KHz



7EB9B4  
2.4KHz



7EB9B2  
3.5KHz



7EB9B0  
Silent

## 2.9 Output Setting

In this chapter, you can configure the output of the device, including carriage return/line feed, serial port encoding setting, setting barcode length, removing barcode digits (remove/keep from beginning and ending), and multi-countries keyboard switching settings, etc. You only need to read the barcode according to the requirements.

### 2.9.1 Carriage Return/Line Feed Setting



7CC791

**\*Add Carriage Return**



7CC790

**Cancel Carriage Return**



7CC781

**Add Line Feed**



7CC780

**\*Cancel Line Feed**

## 2.9.2 Case Conversion

Letter conversion: when outputting barcodes with letter content, you can configure the output result to be all uppercase or all lowercase.

For example: the barcode content is ab12DE, if you scan the "all uppercase" barcode, the output result will be AB12DE; if you scan the "all lowercase" barcode, the output result will be abc12de; if you scan the "case conversion" barcode, the output result will be AB12de; the default case is not converted.



A68861  
All Lowercase



A68862  
All Uppercase



A68863  
Case Conversion



A68860  
\*Not Convert

### 2.9.3 Remove digits from Beginning/Ending

Remove digits from Beginning/Ending can be used at the same time.

Remove digits from Beginning: "B68E6X" (X is the number of digits to remove. If the last number is 1, it means remove one digit; if it is 2, remove two digits; if it is 0, it is not removed.)



B68E61

**Remove 1 digit from Beginning**

Remove digits from Ending: "B6BE6X" (X is the number of digits to remove. If the last number is 1, it means remove one digit; if it is 2, remove two digits; if it is 0, it is not removed.)



B6BE61

**Remove 1 digit from Ending**

### 2.9.4 Keep Data from start/end

You can only choose to keep the beginning or ending digit, but not both. Scan "AC8760" from the digit of the reserved barcode at the beginning, scan "AC8761" from the digit of the reserved barcode at the ending, and then scan the reserved digit barcode, "B69E6X" X is the digit of the reserved data.

For example, if 9 bits are reserved, the maximum number of B69E69 is 255.



AC8760

**Keep beginning digit**



AC8761

**Keep ending digit**



B69E69

**Keep 9 digits**

*Note: Keep the header or keep the tail data is a single option and cannot take effect at the same time. When it is used in combination with the delete data setting, the data will be edited and output in the order of the settings.*

### 3 Barcode Symbology Configuration

This chapter can configure the Barcode Symbology Configuration of the device, including barcode enable/disable, check enable/disable, check output enable/disable, etc.

#### Barcode Configuration

##### 3.1 Quick Setting of Global Shutter



FFFEFD  
Enable All Symbology



FFFEFC  
Disable All Symbology



FFFEFB  
Enable All 1D Symbology



FFFEFA  
Disable All 1D Symbology



FFFEF9  
Enable All 2D Symbology



FFFEF8  
Disable All 2D Symbology

### 3.1.1 Barcode Length Setting

#### 3.1.1.1 One-dimensional code Length Setting

The barcode length setting code can be edited freely with barcode software, and CODE128 can be selected.

For example, the minimum length setting of Telepen is ^3B76E61, 1 means that the barcode with the minimum length of 1 digit can be read, and the maximum length setting code is ^3B77E6255, which means the barcode with the maximum length of 255 digits can be read.

#### Telepen Length Limit



B76E61

The min. Length of Telepen is 1 digit



B77E6255

The max. Length of Telepen is 255 digits

#### Matrix 25 Length Limit



B78E61

The min. Length of Matrix 25 is 1 digit



B79E6255

The max. Length of Matrix 25 is 255 digits

#### 3.1.1.1.1 Chinapost (datalogic 2 of 5) Length Limit



B7AE61

The min. Length of Chinapost is 1 digit



B7BE6255

The max. Length of Chinapost is 255 digits

### 3.1.1.1.2 Code 11 Length Limit



B7CE61

The min. Length of Code 11 is 1 digit



B7DE6255

The max. Length of Code 11 is 255 digits

### 3.1.1.1.3 Codeabar Length Limit



B7EE61

The min. Length of Codeabar is 1 digit



B7FE6255

The max. Length of Codeabar is 255 digits

### 3.1.1.1.4 Interleaved25 Length Limit



B86E61

The min. Length of Interleaved25 is 1 digit



B87E6255

The max. Length of Interleaved25 is 255 digits



### 3.1.1.1.5 Code 128 Length Limit



B88E61

The min. Length of Code128 is one digit



B89E6255

The max. Length of Code128 is 255 digits

### 3.1.1.1.6 Code 93 Length Limit



B8AE61

The min. Length of Code 93 is one digit



B8BE6255

The max. Length of Code 93 is 255 digits

### 3.1.1.1.7 Code 39 Length Limit



B8CE61

The min. Length of Code 39 is one digit



B8DE6255

The max. Length of Code 39 is 255 digits

### 3.1.1.1.8 Industrial 25 Length Limit



B8EE61

The min. Length of Industrial 25 is one digit



B8FE6255

The max. Length of Industrial 25 is 255 digits

### 3.1.1.1.9 Airline25(ITAT 25) Length Limit



B96E61

The min. Length of Airline25 is one digit



B97E6255

The max. Length of Airline25 is 255 digits

### 3.1.1.1.10 MSI Length Limit



B98E61

The min. Length of MSI is one digit



B99E6255

The max. Length of MSI is 255 digits

### 3.1.1.1.11 RSS-expend(GS1 DataBar Expanded) Length Limit



B9AE61

The min. Length of RSS-expend is one digit



B9BE6255

The max. Length of RSS-expend is 255 digits

### 3.1.1.2 QR Code Length Setting

The minimum length of the QR code can be set to 1~255 (the minimum length is 1, the maximum length is 255), 67EE6X (X represents the length of the barcode)



67EE61

The min. length of the QR code is 1



67EE6255

The max. length of the QR code is 255

**QR code length lock:** After locking, only fixed-length QR codes can be read, 67FE6X (X represents the data length)

Setting example: ^367FE620, the last two digits of "20" represent only read the qr code with a barcode data length of 20 digits;



67FE620

Only read QR Code with 20-digit data

### 3.2 Airline 2 of 5 (Standard 2 of 5/IATA 2 of 5)



6667A1  
Enable



6667A0  
\*Disable

### 3.3 Aztec Code



66C761  
Enable



66C760  
\*Disable

#### Aztec Code Direct and Reverse Color



66C770  
\*Regular



66C771  
Both

### 3.4 Codabar



6677A1  
\*Enable



6677A0  
Disable

**Codabar Check**



9EF880

**\*Disable Check**



9EF881

**Enable check and output check character**



9EF882

**Enable check but not output check character**

**Codabar Stop Bit**



6DD7D1

**Enable output beginning&ending character**



6DD7D0

**\*Disable output beginning&ending character**

**Codabar Direct and Reverse Color**



A888C0

**\*Regular**



A888C1

**Both**

### 3.5 Codablock A



8CA761  
Enable



8CA760  
\*Disable

### 3.6 Codablock F



8CA771  
Enable



8CA770  
\*Disable

### 3.7 Code 128



667791  
\*Enable



667790  
Disable

### Code 128 Direct and Reverse Color



A878B0  
\*Regular



A878B1  
Both

### 3.8 Code 11



666791  
Enable



666790  
Disable

#### Code 11 Check



66B7C1  
\*Enable Check



66B7C0  
Disable Check



6E67B0  
\*One check bit



6E67B1  
Two check bits



6DD791  
Enable transmit check character



6DD790  
\*Disable transmit check character

### 3.9 Code 32



6687B1  
Enable



6687B0  
\*Disable

3.10 Code 39



667771  
\*Enable



667770  
Disable

Code 39 Check



9F6862  
\*Disable check



9F6860  
Enable check



9F6861  
Enable check and transmit check character



9F6781  
Enable output beginning&ending digit



9F6780  
\*Disable output beginning&ending digit

Full ASCII Code39



6687D1  
Enable



6687D0  
Disable



**Code 39 Direct and Reverse Color**



A88880  
\*Regular



A88881  
Both

**3.11 Code 93**



667781  
Enable



667780  
\*Disable

**Code 93 Direct and Reverse Color**



A88860  
\*Regular



A88861  
Both

**3.12 Composite**

To enable this symbology, both Micro PDF and RSS-14 must be enabled at the same time.



A66761  
Enable



A66760  
\*Disable

### 3.13 Data Matrix Code



66B791  
Enable



66B790  
\*Disable

#### Matrix Data Matrix



A7F791  
Enable Matrix DM



A7F790  
\*Disable Matrix DM

#### Lattice Data Matrix



66B761  
Enable Lattice DM(DPM)



66B760  
\*Disable Lattice DM(DPM)

#### Data Matrix Direct and Reverse Color



66B780  
\*Regular



66B883  
Both

### 3.14 DOT-CODE



A7F771  
Enable



A7F770  
Disable

#### DOT-CODE Direct and Reverse Color



A66780  
Regular



A66781  
Both

### 3.15 EAN/UPC



6677C1  
\*Enable



6677C0  
Disable

#### EAN/UPC Direct and Reverse Color



A87860  
\*Regular



A87861  
Both

**EAN/UPC Two-digits Additional Code**



6787D1

**Enable**



6787D0

**\*Disable**

**EAN/UPC Five-digits Additional Code**



6787C1

**Enable**



6787C0

**\*Disable**

**EAN/UPC Additional Code that must be recognized**



678791

**Enable**



678790

**\*Disable**

**EAN/UPC Boundary Detection (Quite Zone)**



AE8860

**\*Normal Border**



AE8861

**Narrow Border**



AE8862

**Borderless**

**3.16 EAN-8**



6687A1  
\*Enable



6687A0  
Disable

**EAN-8 Check**



6DF761  
\*Enable output check bit



6DF760  
Disable output check bit

**EAN-8 convert to EAN-13**



6DB781  
Enable



6DB780  
\*Disable

### 3.17 EAN-13



668771  
**\*Enable**



668770  
**Disable**

#### EAN-13 Check



6DF781  
**\*Enable output check bit**



6DF780  
**Disable output check bit**

### 3.18 GS1 DataBar Expanded



66A7B1  
**Enable**



66A7B0  
**\*Disable**

### 3.19 GS1 DataBar Limited



66A7A1  
Enable



66A7A0  
\*Disable

### 3.20 GS1 DataBar Omnidirectional



66A791  
Enable



66A790  
\*Disable

### 3.21 HANXIN



8D9771  
Enable



8D9770  
\*Disable

### 3.22 Hong Kong 2 of 5(China post)



6697C1  
Enable



6697C0  
\*Disable

Notice: When reading a postal, all other postal need close.

### 3.23 Interleaved 2 of 5



6677B1  
\*Enable



6677B0  
Disable

#### Interleaved 2 of 5 Check



9EF861  
Open check



9EF860  
\*No check



9EF862  
Open check and transmit check character

#### Interleaved 2 of 5 Direct and Reverse Color



A888A0  
\*Regular



A888A1  
Both

#### Febraban Barcode



AF6761  
Enable



AF6760  
\*Disable



### 3.24 Matrix 2 of 5



6667B1  
Enable



6667B0  
\*Disable

### Matrix 2 of 5 Check



66B7D1  
Enable check bit



66B7D0  
Disable check bit



6DE781  
Enable output check bit



6DE780  
\*Disable output check bit

### 3.25 Maxicode



66C7A1  
Enable



66C7A0  
\*Disable

**3.26 MSI**



668781  
Enable



668780  
\*Disable

**3.27 Micro PDF417**



66A7D1  
Enable



66A7D0  
\*Disable

**3.28 PDF417**



666761  
\*Enable



666760  
Disable

**PDF417 Direct and Reverse Color**



A8D860  
\*Regular



A8D861  
Both

### 3.29 Pharmacode



ACF7B1  
Enable



ACF7B0  
Disable

### 3.30 Micro QR Code



66C7B1  
Enable



66C7B0  
\*Disable

### Micro QR Code Direct and Reverse Color



66C7C0  
\*Regular



66C7C1  
Both

### 3.31 QR Code



66C781  
\*Enable



66C780  
Disable

#### QR Code Direct and Reverse Color



66C790  
\*Regular



66C791  
Both

#### QR Code Dot Matrix



AE87C1  
Enable



AE87C0  
Disable

#### QR Code Multi-threshold



AE87D1  
Enable



AE87D0  
Disable

#### QR Code URL Code



A6E760  
\*Enable



A6E761  
Disable

**3.32 RSS-14**



66A791  
Enable



66A790  
\*Disable

**3.33 RSS-LIMITED**



66A7A1  
Enable



66A7A0  
\*Disable

**3.34 RSS-EXPANDED**



66A7B1  
Enable



66A7B0  
\*Disable

**3.35 Straight 2 of 5 Industrial**



667761  
Enable



667760  
\*Disable

**3.36 Telepen**



6667D1  
Enable



6667D0  
\*Disable

**3.37 Trioptic Code**



669781  
Enable



669780  
\*Disable

**3.38 UPC-A**



6687C1  
\*Enable



6687C0  
Disable

**UPC-A Check**



6DB7D1

\*Enable output check bit



6DB7D0

Disable output check bit

### UPC-A Output Numeric System Characters



6DB771  
\*Enable



6DB770  
Disable

### UPC-A convert to EAN-13



6DB7A1  
Enable



6DB7A0  
\*Disable

### 3.39 UPC-E



668761  
\*Enable



668760  
Disable

### UPC-E Check



6DB7C1  
Enable output check bit



6DB7C0  
\*Disable output check bit

## UPC-E Output Header Characters (System Characters)



6DB791  
Enable



6DB790  
\*Disable

## UPC-E convert to UPC-A(Extend to 12 bits)



6DB7B1  
Enable



6DB7B0  
\*Disable

## 3.40 GridMatrix



8D9761  
\*Enable



8D9760  
Disable

## 3.41 ISBN 13 Conversion Setting

### 3.41.1 Convert to ISBN



6797C1  
Enable



6797C0  
\*Disable



### 3.41.2 978 Beginning Barcode ISBN Conversion



6797D1

**Enable**



6797D0

**\*Disable**

### 3.41.3 979 Beginning Barcode ISBN Conversion



8B77A1

**Enable**



8B77A0

**\*Disable**

### 3.41.4 Add Bookland Prefix



8B77C1

**Enable**



8B77C0

**\*Disable**

### 3.41.5 Transmit ISBN Check Digit



6797B1

**Enable**



6797B0

**\*Disable**

### 3.42 ISSN 13 Conversion Setting

#### 3.42.1 Convert barcodes starting with 977 to ISSN



7B77D1

Enable



7B77D0

\*Disable

#### 3.42.2 ISSN convert to " - "



7B77C1

Enable



7B77C0

\* Disable

#### 3.42.3 Transmitting the Check Digit of the ISSN



7B77B1

Enable



7B77B0

\*Disable

## 4 GS Character Conversion

This mode is to output GS control characters as text characters.



AC97A1

**Enable control character conversion**



AC97A0

**Disable control character conversion**

### 4.1.1 GS Output Mode



AC9A61

**GS is replaced by |**



AC9A65

**GS is replaced by <GS>**



AC9A66

**GS is replaced by (GS)**



AC9A67

**GS is replaced by 'GS'**



AC9A68

**GS is replaced by `GS`**



AC9A69

**GS is replaced by GS**

## 5 Code ID Setting



A8E7A1

Enable output Code ID



A8E7A0

\* Disable outputCode ID

### 5.1.1 Annex: Code ID Table

Barcode	Code ID	Barcode	Code ID
Airline 2 of 5 (Standard 2 of 5/IATA 2 of 5)	f	HANXIN	
Aztec Code	z	Interleaved 2 of 5	e
Codabar	a	Hong Kong 2 of 5(China post)	Q
Codablock A	v	Matrix 2 of 5	m
Codablock F	q	Maxicode	
Code 128	j	MSI	g
Code11	h	Micro PDF417	R
Code 32	<	PDF417	r
Code 39	b	Pharmacode	
Code 93	i	Micro QR Code	s
Composite	!	QR Code	s
Data Matrix	w	RSS-14	y
ENA-8	D	RSS-LIMITED	{
EAN-13	d	RSS-EXPANDED	}
GS1 DataBar Expanded	}	Straight 2 of 5 Industrial	f
GS1 DataBar Limited	{	Telepen	t
GS1 DataBar Omnidirectional	y	Trioptic Code	=
UPC-A	c	DOT_CODE	.
UPC-E	E	ISBN 13	d
GridMatrix	X	ISSN	d

## 6 Control Character Output

After this function is enabled, control characters (invisible characters) are output as text characters, for example, carriage return is output as <CR>.



A867D1

Enable



A867D0

Unable

## 7 Batch settings

When multiple settings are required for scanning settings, it is very cumbersome to set one by one. At this time, we can save all the information that needs to be set as a barcode information, and the device can complete multiple settings after reading the barcode.

1. The batch setting code needs to use QR code. QR codes can be produced by barcode editing software.
2. Command format: command header (^3^3999991) + setting command (xxxxxx), each command is separated by ; (semicolon), and ends with ; (semicolon).
3. Example: Turn off the sound (B667D1) and turn on the vibration (A8E791), the batch command is:  
^3^3999991B667D1;A8E791;

Example of setup code:



`^3^3999991B667D1;7CC790;`