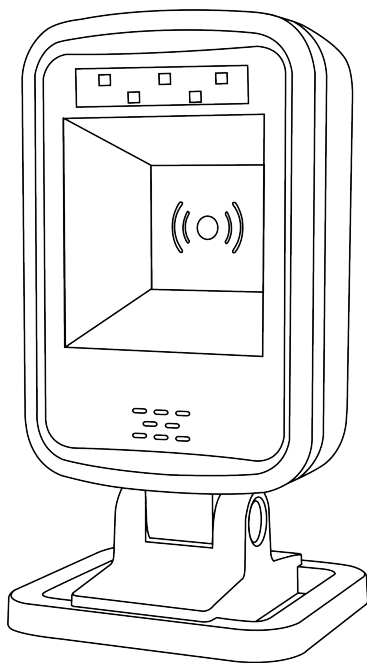


2D Desktop Barcode Scanner User Manual



BROCHURE

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1st Chapter:Introduction

This user manual are applied for our 2D desktop barcode scanner which based on 2D image scanning to identify 1D and 2D barcodes. They apply a complete set of newly developed patented technologies and have strong recognition performance. Support automatic continuous scanning mode, fast and flexible.

This chapter will introduce the method of using the product step by step with the picture. Please compare the actual product you have purchased when reading the document, so that it is more conducive to your understanding of this document. This chapter is applicable to ordinary users, maintenance personnel and software developers.

2nd Chapter:Product Features

- * Research and development independently, with a full set of patents, plug and play without installing drivers.
- *The wide voltage design avoids the situation that data transmission cannot be uploaded due to voltage fluctuations.
- *The 32-bit main control chip is equipped with patented software, which can smoothly interpret reflective, wrinkled, blurred, and colored barcodes, and can also decode normally in strong light and dark light environments.
- *Support RS232, USB, USB-COM, multiple interfaces to ensure compatibility with your existing and future terminals.
- *Smooth and coordinated appearance can reduce user fatigue, make the operation extremely comfortable, and improve work efficiency significantly

3rd Chapter:Parameters

Electrical Parameters

Interfaces: USB,USB-COM,RS232(Optional)

Power Voltage: 5V

Current Consumption: $\pm 10\%$

Current of Power ON: 290mA

Standby Current: 180mA

Working Current: 300mA

Physical Parameter

Light Source: Red LED light

Accuracy: $\geq 4\text{mil}$

Resolution: 640 pixels (H) x 480 pixels (V)

Scan Angle: 39°(Pitch), 29°(Tilt), 360°(Rotate)

Environment

Working Temperature: 0°C to 40°C (32°F to 104°F)

Storage Temperature: -30°C to 60°C (-22°F to 140°F)

Humidity: 5% to 95% (Non-condensing)

Ambient Light: It will not affect the normal office and factory lighting environment or direct exposure to sunlight

Drop Test: Can withstand the impact of multiple drops from a height of 1.5 meters to mixed ground

Electrostatic Discharge: Meet the requirements of 15kV air discharge and 8kV contact discharge

Decode Ability

1D: Codabar、Code 39、Code 32 Pharmaceutical (PARAF)、Interleaved 2 of 5、NEC 2 of 5、Code 93、Straight 2 of 5 Industrial、Straight 2 of 5 IATA、Matrix 2 of 5、Code 11、Code 128、GS1-128、UPC-A、UPC-E、EAN/JAN-8、EAN/JAN-13、MSI、GS1 DataBar Omnidirectional、GS1 DataBar Limited、GS1 DataBar Expanded、China Post(Hong Kong 2 of 5)、Korea Post

2D: PDF417, QR code, Matrix 2 of 5, MicroPDF417, Australian Post, Canada Post, Japan Post, MaxiCode, Codablock, Aztec, Dutch Post, DataMatrix, etc.

Default Enable Code types: Aztec、Codabar、Code39、Code93、Code128、Data Matrix、EAN/JAN-8、EAN/JAN-13、GS1-128、GS1-DataBar、Interleaved2of5、NEC2of5、PDF417、QR Code、UPC-A、UPC-E0

Depth of Scan

Code39(5mil): 0-9cm

Code39(13mil): 0-17.5cm

UPC-A(13mil): 1-17cm

QR(20mil): 0-13cm

QR(30mil): 0-18cm

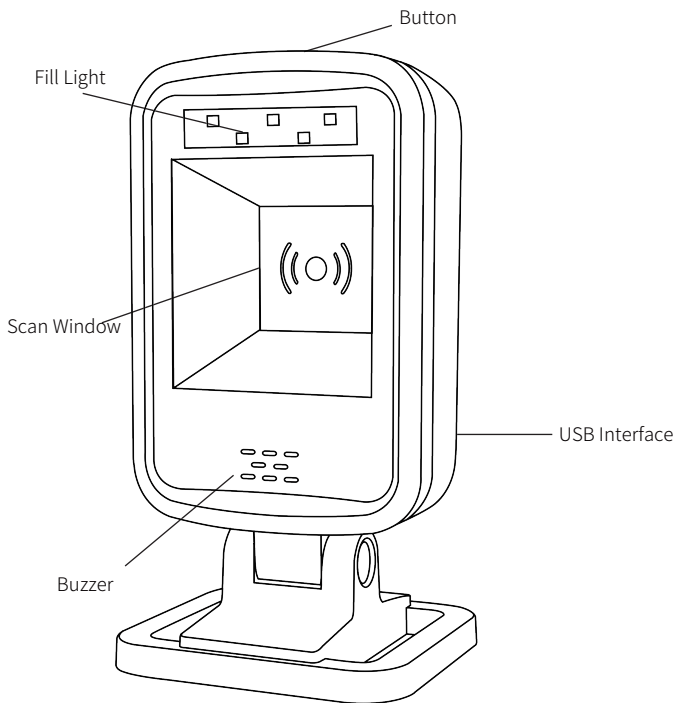
Alipay Payment Code(QR 3*3): 1-32cm

Wechat Payment Code(QR 2.3*2.3): 0-28cm

*Min distance of scanning depend of scan angle and code length

*Payment code of Alipay and Wechat depend on the phone brightness

Appearance



Factory Default Setting

If you want to apply the factory default settings to the barcode scanner, scanning following setting code, the "Factory Default Setting" barcode.



(800006.)

Factory Default Setting

4nd Chapter: Interfaces

Introduction

Introducing USB and RS232 interfaces and their related configurations in this chapter.

RS232

Scanning setting code "RS232" barcode to connect with host via serial.

Serial interface default configuration: Baud Rate: 115200; Data Bit: 8; Parity Bit: none; Stop Bit: 1, Ending Character: CR+LF



(8810010.)

RS232

RS232 Baud Rater

Baud rate: Send data from the barcode scanner to the terminal at the specified rate. The terminal must be set to the same baud rate as the barcode scanner to communicate normally. Default=115200



(8310030.)

300



(8310031.)

600



(8310032.)

1200



(8310033.)

2400



(8310034.)

4800



(8310035.)

9600



(8310036.)
19200



(8310038.)
57,600



(8310037.)
38400



(8310039.)
*115,200

RS232 : Data Bits,Stop Bits,Parity



(8310063.)

Data Bits:7, Stop Bits:1, Even Parity



(8310060.)

Data Bits:7, Stop Bits:1, Parity:None



(8310066.)

Data Bits:7, Stop Bits:1, Odd Parity



(8310064.)

Data Bits:7, Stop Bits:2, Even Parity



(8310061.)

Data Bits:7, Stop Bits:2, Parity:None



(8310067.)

Data Bits:7, Stop Bits:2, Odd Parity



(8310065.)

Data Bits:8, Stop Bits:2, Even Parity



(8310062.)

* Data Bits:8, Stop Bits:1, Parity:None



(8310068.)

Data Bits:8, Stop Bits:1, Odd Parity

USB

USB HID

Scan the following bar code to configure the bar code scanner to USB HID Keyboard mode. CR and LF are added by default



(881001124.)

USB HID

USB COM

Scan following barcode to configure the bar code scanner to USB-COM mode, and emulate the conventional COM port which is based on RS232. If your host are used Microsoft Windows system, you need to download the driver. If your host are used Apple Macintosh system, the computer will recognize the barcode scanner as a USB CDC device automatically.



(881001133.)

USB COM

Note: No additional configuration is required (E.g.:Baud Rate)

5rd Chapter:Input/Output Settings

Introduction

Introduce the configuration of the buzzer and LED when the barcode scanner is electrified, decoded, and pressed.

Buzzer Setting when Electrifying

Scan following setting codes to choose buzzer on or off of when barcode scanner get electrified. Default setting is buzzer ON.



(8410130.)

Buzzer OFF



(8410131.)

* Buzzer ON

Buzzer Setting when Decode successfully

Buzzer ON or OFF Setting

Scan following setting codes to choose buzzer on or off of when decode successfully.
Default setting is buzzer on.



(8410010.)
Buzzer OFF



(8410011.)
*Buzzer ON

Volume Settings

Scan the following setting code to choose the volume of buzzer of when decode successfully. Default setting is high.



(8410091.)
Low



(8410092.)
Middle



(8410093.)
*High



(8410090.)
OFF

Frequency Settings

Scan the following setting code to choose the buzzer frequency of when decode successfully. Default setting is middle



(8410061600.)
Low(1600 Hz)



(8410062400.)
* Middle(2400 Hz)



(8410064200.)
High(4200 Hz)

Beep Status Setting after Decoding Successfully

Scan following setting code to choose normal beep or short beep of when decode successfully. Default setting is normal beep.



(8410020.)
* Normal Beep



(8410021.)
Short Beep

Output Delayed

Scan following setting codes to choose time interval between 1st scanning and next scanning. Default time interval is 750ms.



(8510060.)

No Delay



(851006350.)

(350 ms)



(851006750.)

(750 ms)



(8510061000.)

(1, 000 ms)

Lighting Setting



(8980051.)

ON



(8980050.)

OFF

Standby Setting



5s (Default)



1Minutes



3Minutes



5Minutes



Never Standby

6th Chapter:Data Editing

Prefix/Suffix Settings

Note:Add up to 10 characters as prefix and suffix to each barcode

1:Add customize prefix or suffix to all code types.

E.g.1:Add XYZ as prefix or suffix:

Step 1:Checking Appendix 1: the HEX value of all code is 99.

Step 2:Checking Appendix 2: the HEX value of X Y Z are 58,59,5A.

Step 3:Scanning setting code "Add Prefix" or "Add Suffix" in page 16.

Step 4:Find the setting codes corresponding to 9, 9, 5, 8, 5, 9, 5, A in Appendix 3 and scan them one by one

Step 5:Scanning setting code "Save" in page 17.

Note:If an error occurs while scanning the setup code in Appendix 3,scan setting code "Abandon", and repeat step 3.

2:Add customize prefix or suffix for a specific code type.

E.g.2:Add Q as prefix for QR code.

Step 1:Checking Appendix 1:the HEX value of QR code is 73

Step 2:Checking Appendix 2:the HEX value of Q is 51

Step 3:Scanning setting code "Add Prefix" or "Add Suffix" in page 16.

Step 4:Find setting codes corresponding to 7, 3, 5,1 in Appendix 3 and scan them one by one

Step 5:Scanning setting code "Save" in page 17.

3:Cancel customize prefix or suffix for a specific code type

E.g.3:Cancel customize prefix or suffix for QR code.

Step 1:Checking Appendix 1:the HEX value of QR code is 73

Step 2:Scan setting code "Clear Prefix for one code" or "Clear Suffix for one code" in page 16

Step 3:Find setting codes corresponding to 7, 3 in Appendix 3 and scan them one by one

Note:If you need to cancel the prefix or suffix of all code types, please scan setting code"Clear All Prefix"or"Clear All Suffix".



(889002.)

Add Prefix



(889004.)

Clear Prefix for one code



(889003.)

Clear All Prefix



(800002.)

Save



(888002.)

Add Suffix



(888004.)

Clear Suffix for one code



(888003.)

Clear All Suffix



(800000.)

Abandon

Ending Character Settings



(890000.)

CR(Carriage Return)



(888002990A.)

LF(Line Feed)



(888002990D0A.)

CR+LF

Keyboard Operation

The scanner can add "Keyboard Operation" after outputting barcode data, for example, adding "save" after output.

Step 1: Query the 2-digit hexadecimal value corresponding to the "Keyboard Operation" that needs to be added from the "Keyboard Operation ASCII Conversion Table", and determine the 2-digit hexadecimal value of the symbolics that needs to be set.

Step 2: Scan the setting bar code "Enable Keyboard Operation".

Step 3: Determine the order of output. For example, if "Keyboard Operation" needs to be added as a prefix, scan the "Add Prefix" to set the barcode. "Keyboard Operation"

needs to be added as a suffix, scan the "Add Suffix" to set the barcode.

Step 4: Scan the corresponding 4-digit hexadecimal value (including "Symbolics" and corresponding "Keyboard Operation") in the "Appendix Chart" of this manual according

to the corresponding value.

Step 5: Scan "Save".

Step 6: Scan "Disable Keyboard Operation".



(8210042)

Start Keyboard Operation



(8210040)

Stop Keyboard Operation

Function Code Transmission Setting

When the function characters transmission is enabled and the data of code contains the function characters, the barcode scanner will transmit the data of function character to the terminal. Default setting is enable.



(8000051.)

Enable



(8000050.)

Disable

Data Transmission Delayed

E.g.1: Setting data transmission 100ms delayed

Step 1: Scanning setting code "Data Transmission Delayed" in page 18

Step 2: Find setting codes corresponding to 2, 0 in Appendix 3 and scan them one by one (Why 2, 0? Because $100/5=20$, if setting 150ms delayed, it will be 3, 0)

Step 3: Scanning setting code "Save" in page 18



(851004.)

Data Transmission Delayed

7th Chapter:Code Types

All Code Types

Scan following setting codes to choose all code types enabled or disabled.



(9990011.)

Enable All Codes



(9990010.)

Disable All Codes

Notes:1:It also can read setting codes in this manual after scanning setting code "Disable All Codes" .

2:It can not read 2D postal code even scanning setting code "Enable All Code"

Scanning setting code "Enable" of 2D postal code in page

3:If you need the scanner only read one or several code types,scanning "Disable All Codes" and then scanning "Enable" of those code types.

Decode Length Settings

Introduction:The effective reading length of some code types can be set. If the data length of the code does not match the effective reading length, the barcode scanner will beep specially to show the error. If setting the same value for the minimum and maximum length, the bar code scanner will only read a code of a fixed length. It helps reduce misreading.

E.g.: Setting Code 93 code decode length as 06-10 characters

Minimum Length=06,Maximum Length=10

Step 1:Scanning setting code "Min Decode Length" of Code 93 in page 24

Step 2:Find the setting code corresponding to 6 in Appendix 3 and scan it

Step 3:Scanning setting code "Save" .

Step 4:Scanning setting code "Max Decode Length" of code 93 in page 24

Step 5:Find the setting code corresponding to 1,0 in Appendix 3 and scan them one by one

Step 6:Scanning setting code "Save" .

Done

1D Code types



(9950040.)

Enable All 1D Code



(9950041.)

Disable All 1D Code

2D Code Types



(9950070.)

Enable All 2D Code



(9950071.)

Disable All 2D Code

Codabar



(900000.)

Default All Codabar Settings

Enable/Disable



(9000031.)

Enable



(9000030.)

Disable

Start/Stop Bit

Scan following setting code to select whether to transmit or not to transmit the start/stop bits. Default setting is disable transmit.



(9000061.)

Enable Transmit



(9000060.)

Disable Transmit

Check Bit



(9000010.)

No Check Bit



(9000011.)

Disable Transmit Check Bit



(9000012.)

Enable Transmit Check Bit

Cascade

When barcode cascading is enabled, the barcode scanner will look for a barcode with a "D" character at the beginning and a neighboring barcode with a "D" character at the end. In this case, the two barcodes will form one barcode, and ignore all the "D" characters in the barcode



A 1 2 3 4 D D 5 6 7 8 A



(9000021.)

ON



(9000022.)

Need



(9000020.)

OFF

ON: Barcode Scanner not only read normal codabar codes, but also cascaded codabar code
 Need: Scanning "Need" after scanning "ON", the scanner will only read cascaded codabar codes

OFF: Barcode Scanner will not read cascaded codabar codes.

Decode Lenth Setting

Scanning following setting code to modify the min or max decode length of Codabar. Refer to page 19 “Decode Length Settings” .

Default setting min decode length is 4, max is 60.

Min decode length is 2, max is 60



(900005.)

Min Decode Length



(900004.)

Max Decode Length

Code 39



(901000.)

Default All Code 39 Settings

Enable/Disable



(9010011.)

Enable



(9010010.)

Disable

Start/Stop Bit

Scan following setting code to select whether to transmit or not to transmit the start/stop bits. Default setting is disable transmit.



(9010091.)

Enable Transmit



(9010090.)

Disable Transmit

Check Bit



(9010040.)

No Check Bit



(9010041.)

Disable Transmit Check Bit



(9010042.)

Enable Transmit Check Bit

Decode Length Setting

Scanning following setting code to modify the min or max decode length of Code 39. Refer to page 19 "Decode Length Settings".

Default setting min decode length is 0, max is 48.

Min decode length is 0, max is 48.



(901008.)

Min Decode Length



(901007.)

Max Decode Length

Code 32 Pharmaceutical (PARAF)

Code 32 is a form of Code 39 barcode and used on Italian medicines. When configuring code 32, you need to enable code 39 first.

Code 32 is also named PARAF



(9010051.)

Enable



(9010050.)

Disable

Interleaved 2 of 5



(902000.)

Default All Interleaved 2 of 5 Settings

Enable/Disable



(9020021.)

Enable



(9020020.)

Disable

Check Bit



(9020010.)

No Check Bit



(9020011.)

Disable Transmit Check Bit



(9020012.)

Enable Transmit Check Bit

Decode Length Setting

Scanning following setting code to modify the min or max decode length of Interleaved 2 of 5. Refer to page 19 “Decode Length Settings” .

Default setting min decode length is 4, max is 80.

Min decode length is 2, max is 80.



(902004.)

Min Decode Length



(902003.)

Max Decode Length

NEC 2of 5



(903000.)

Default All NFC 2 of 5 Settings

Enable/Disable



(9030011.)

Enable



(9030010.)

Disable

Check Bit



(9030020.)

No Check Bit



(9030021.)

Disable Transmit Check Bit



(9030022.)

Enable Transmit Check Bit

Decode Length Setting

Scanning following setting code to modify the min or max decode length of NFC 2 of 5. Refer to page 19 “Decode Length Settings” .

Default setting min decode length is 4, max is 80.

Min decode length is 2, max is 80.



(903004.)

Min Decode Length



(903003.)

Max Decode Length

Code 93



(904000.)

Default All Code 93 Settings

Enable/Disable



(9040021.)

Enable



(9040020.)

Disable

Decode Length Setting

Scanning following setting code to modify the min or max decode length of Code 93. Refer to page 19 "Decode Length Settings".

Default setting min decode length is 0, max is 80.

Min decode length is 0, max is 80.



(904004.)

Min Decode Length



(904003.)

Max Decode Length

Straight 2 of 5 Industrial (three-bar start/ stop)



(905000.)

Default All Straight 2 of 5 Industrial Settings

Enable/Disable



(9050011.)

Enable



(9050010.)

Disable

Decode Length Setting

Scanning following setting code to modify the min or max decode length of Straight 2 of 5 Industrial. Refer to page 19 "Decode Length Settings".

Default setting min decode length is 4, max is 48.

Min decode length is 1, max is 48.



(905003.)

Min Decode Length



(905002.)

Max Decode Length

Straight 2 of 5 IATA (two- bar start/ stop)



(906000.)

Default All Straight 2 of 5 IATA Settings

Enable/Disable



(9060011.)

Enable



(9060010.)

Disable

Decode Length Setting

Scanning following setting code to modify the min or max decode length of Straight 2 of 5 IATA. Refer to page 19 “Decode Length Settings” .

Default setting min decode length is 4, max is 48.

Min decode length is 1, max is 48.



(906003.)

Min Decode Length



(906002.)

Max Decode Length

Matrix 2 of 5



(907000.)

Default All Matrix 2 of 5 Settings

Enable/Disable



(9070011.)

Enable



(9070010.)

Disable

Decode Length Setting

Scanning following setting code to modify the min or max decode length of Matrix 2 of 5. Refer to page 19 “Decode Length Settings” .

Default setting min decode length is 4, max is 80.

Min decode length is 1, max is 80.



(907003.)

Min Decode Length



(907002.)

Max Decode Length

Code 11



(908000.)

Default All Code 11 Settings

Enable/Disable



(9080021.)

Enable



(9080020.)

Disable

Check Bits



(3110280.)

One Check Bit



(3110281.)

Two Check Bits

Decode Length Setting

Scanning following setting code to modify the min or max decode length of Code 11. Refer to page 19 “Decode Length Settings” .

Default setting min decode length is 4, max is 80.

Min decode length is 1, max is 80.



(908004.)

Min Decode Length



(908003.)

Max Decode Length

Code 128



(909000.)

Default All Code 128 Settings

Enable/Disable



(9090011.)

Enable



(9090010.)

Disable

ISBT 128 Cascade**(9020051.)**

ISBT 128 Enable

**(9020050.)**

*ISBT 128 Disable

Decode Length Setting

Scanning following setting code to modify the min or max decode length of Code 128. Refer to page 19 “Decode Length Settings” .

Default setting min decode length is 0, max is 80.

Min decode length is 0, max is 80.

**(909003.)**

Min Decode Length

**(909002.)**

Max Decode Length

UPC-A**(912000.)**

Default All Code 128 Settings

Note: When UPC-A gets disabled, it will be decoded as EAN-13.

Enable/Disable**(9120031.)**

Enable

**(9120030.)**

Disable

Check Bits**(9120041.)**

Enable

**(9120040.)**

Disable

Digital System**(9120051.)**

Enable

**(9120050.)**

Disable

Supplementals

Scanning following setting code to select enable or disable 2 or 5 supplementals
Default setting is 2 and 5 supplementals disabled.



(9120011.)

2 Supplementals ON



(9120010.)

2 Supplementals OFF



(9120021.)

5 Supplementals ON



(9120020.)

5 Supplementals OFF

Necessary Supplementals

The barcode scanner only read UPC-A with supplementals after it read following setting code "Enable". And at this case, you need to enable 2 or 5 supplementals.
Default setting is disable.



(9120061.)

Enable



(9120060.)

Disable

Supplementals Separator



(9120071.)

Enable



(9120070.)

Disable

Notes: Scanning following setting codes to select transmit or not transmit UPC-A to EAN-13



(9120111.)

Not Transmit



(9120110.)

Transmit

GS1- 128



(910000.)

Default All GS1-128 Settings

Enable/Disable



(9100011.)

Enable



(9100010.)

Disable

Decode Length Setting

Scanning following setting code to modify the min or max decode length of GS1-128. Refer to page 19 "Decode Length Settings".

Default setting min decode length is 1, max is 80.

Min decode length is 1, max is 80.



(910003.)

Min Decode Length



(910002.)

Max Decode Length

UPC- E0



(914000.)

Default All UPC-E0 Settings

Enable/Disable

Most of UPC code is started with 0, getting it enabled before scanning those code.

If need to read UPC code which is started with 1, getting UPC-E1 enabled.

Default setting is enable.



(9140101.)

Enable



(9140100.)

Disable

Barcode Expand

Scanning following setting code to select whether expanding UPC-E to UPC-A



(9140021.)

Enable



(9140020.)

Disable

Necessary Supplementals

It will only read UPC-E codes which with supplementals after scanning following setting code" Enable".



(9140031.)

Enable



(9140030.)

Disable

Supplementals Separator

There is a space after scanning following setting code" Enable".

Default setting is enable.



(9140041.)

Enable



(9140040.)

Disable

Check Bits

Scanning following setting to select whether transmit last check bit.



(9140051.)
Enable



(9140050.)
Disable

Digital System

UPC digital system will be transfered in front of barcode data.



(9140061.)
Enable



(9140060.)
Disable

Supplementals

Scanning following setting code to select enable or disable 2 or 5 supplementals.
Default setting is 2 or 5 supplementals disabled.



(9140071.)
2 Supplementals ON



(9140070.)
2 Supplementals OFF



(9140081.)
5 Supplementals ON



(9140080.)
5 Supplementals OFF

UPC-E1

Enable/Disable

Most of UPC code is started with 0, getting it enabled before scanning those code.
If need to read UPC code which is started with 1, getting UPC-E1 enabled.
Default setting is disable.



(9140091.)
Enable



(9140090.)
Disable

EAN/ JAN- 13**(915000.)**

Default All EAN/JAN-13 Settings

Enable/Disable**(9150011.)**

Enable

**(9150010.)**

Disable

Check Bits**(9150021.)**

Enable

**(9150020.)**

Disable

Supplementals

Scanning following setting code to select enable or disable 2 or 5 supplementals.
Default setting is 2 or 5 supplementals disabled.

**(9150031.)**

2 Supplementals ON

**(9150030.)**

2 Supplementals OFF

**(9150041.)**

5 Supplementals ON

**(9150040.)**

5 Supplementals OFF

Necessary Supplementals

It only read EAN/JAN-13 code with supplementals after scanning following setting code "Enable". Default setting is disable.



(9150051.)
Enable



(9150050.)
Disable

Supplementals Separator

There is a space between normal data and supplementals after scanning following setting code "Enable". Default setting is enable.



(9150061.)
Enable



(9150060.)
Disable

ISBN Translate

EAN-13 Bookland characters will be converted to the equivalent ISBN characters format after scanning following setting code "Enable". Default setting is disable.



(9150071.)
Enable



(9150070.)
Disable

EAN/JAN- 8



(916000.)

Default All EAN/JAN-8 Settings

Enable/Disable



(9160011.)
Enable



(9160010.)
Disable

Check Bits



(9160021.)
Enable



(9160020.)
Disable

Supplementals

Scanning following setting code to select whether transmit 2 or 5 supplementals of EAN/JAN-8 code. Default setting is disable.



(9160031.)

2 Supplementals ON



(9160030.)

2 Supplementals OFF



(9160041.)

5 Supplementals ON



(9160040.)

5 Supplementals OFF

Necessary Supplementals

Barcode scanner only read EAN/JAN-8 code which with supplementals after scanning following setting code" Enable". Default setting is disable.



(9160051.)

Enable



(9160050.)

Disable

Supplementals Separator

There is a space between normal data and supplementals data after scanning following setting code" Enable". Default setting is enable.



(9160061.)

Enable



(9160060.)

Disable

MSI



(917000.)

Default All MSI Settings

Enable/Disable



(9170011.)

Enable



(9170010.)

Disable

Check Bits



(9170020.)

Disable Transmit Check Bits



(9170021.)

Enable Transmit Check Bits



(9170026.)

No Check Bits

Decode Length Settings

Scanning following setting code to modify the min or max decode length of MSI. Refer to page 19 “Decode Length Settings” .

Default setting min decode length is 4, max is 48.

Min decode length is 4, max is 48.



(917004.)

Min Decode Length



(917003.)

Max Decode Length

GS1 DataBar Omnidirectional



(918000.)

Default All GS1 DataBar Omnidirectional Settings

Enable/Disable



(9180011.)

Enable



(9180010.)

Disable

GS1 DataBar Limited



(919000.)

Default All GS1 DataBar Limited Settings

Enable/Disable



(9190011.)

Enable



(9190010.)

Disable

GS1 DataBar Expanded



(920000.)

Default All GS1 DataBar Expanded Settings

Enable/Disable



(9200011.)

Enable



(9200010.)

Disable

Decode Length Settings

Scanning following setting code to modify the min or max decode length of GS1 DataBar Expanded. Refer to page 19 “Decode Length Settings” .
Default setting min decode length is 4, max is 74.

Min decode length is 4, max is 74.



(920003.)

Min Decode Length



(920002.)

Max Decode Length

PDF417



(924000.)

Default All PDF417 Settings

Enable/Disable



(9240011.)

Enable



(9240010.)

Disable

Decode Length Settings

Scanning following setting code to modify the min or max decode length of PDF-417. Refer to page 19 “Decode Length Settings” .

Default setting min decode length is 1, max is 2750.

Min decode length is 1, max is 2750.



(924003.)

Min Decode Length



(924002.)

Max Decode Length

Data Matrix



(930000.)

Default All Data Matrix Settings

Enable/Disable



(9300011.)

Enable



(9300010.)

Disable

Decode Length Settings

Scanning following setting code to modify the min or max decode length of Data Matrix. Refer to page 19 “Decode Length Settings” .

Default setting min decode length is 1, max is 3116.

Min decode length is 1, max is 3116.



(930002.)

Min Decode Length



(930003.)

Max Decode Length

QRCode



(928000.)

Default All QRCode Settings

Enable/Disable

Following setting codes both work for QR code and Micro QR code.



(9280011.)

Enable



(9280010.)

Disable

Decode Length Settings

Scanning following setting code to modify the min or max decode length of QR code. Refer to page 19 “Decode Length Settings” .

Default setting min decode length is 1, max is 7089.

Min decode length is 1, max is 7089.



(928003.)

Min Decode Length



(928002.)

Max Decode Length

Aztec Code



(931000.)

Default All Aztec Code Settings

Enable/Disable



(9310011.)

Enable



(9310010.)

Disable

Decode Length Settings

Scanning following setting code to modify the min or max decode length of Aztec Code. Refer to page 19 “Decode Length Settings” .

Default setting min decode length is 1, max is 3832.

Min decode length is 1, max is 3832.



(931003.)

Min Decode Length



(931002.)

Max Decode Length

China Post (Hong Kong 2 of 5)



(936000.)

Default All China Post (Hong Kong 2 of 5) Settings

Enable/Disable



(9360011.)

Enable



(9360010.)

Disable

Decode Length Settings

Scanning following setting code to modify the min or max decode length of China Post (Hong Kong 2 of 5).Refer to page 19 “Decode Length Settings” .
Default setting min decode length is 4,max is 80.
Min decode length is 2,max is 80.



(936003.)

Min Decode Length



(936002.)

Max Decode Length

Korea Post



(937000.)

Default All Korea Post Settings

Enable/Disable



(9370011.)

Enable



(9370010.)

Disable

Decode Length Settings

Scanning following setting code to modify the min or max decode length of Korea Post Code.Refer to page 19 “Decode Length Settings” .
Default setting min decode length is 4,max is 48.
Min decode length is 2,max is 80.



(937003.)

Min Decode Length



(937002.)

Max Decode Length

Check Bits



(9370041.)

Enable



(9370040.)

Disable

Han Xin code



(932000.)

Default All Han Xin code Settings

Enable/Disable



(9320011.)

Enable



(9320010.)

Disable

Decode Length Settings

Scanning following setting code to modify the min or max decode length of HanXin Code.Refer to page 19 “Decode Length Settings” .

Default setting min decode length is 1,max is 1000.

Min decode length is 1,max is 1000.



(932003.)

Min Decode Length



(932002.)

Max Decode Length

Maxi code



(929000.)

Default All Maxi code Settings

Enable/Disable



(9290011.)

Enable



(9290010.)

Disable

Decode Length Settings

Scanning following setting code to modify the min or max decode length of Maxi Code.Refer to page 19 “Decode Length Settings” .

Default setting min decode length is 1,max is 150.

Min decode length is 1,max is 150.



(929003.)

Min Decode Length



(929002.)

Max Decode Length

Micropdf



(925000.)

Default All Micropdf Settings

Enable/Disable



(9250011.)

Enable



(9250010.)

Disable

Decode Length Settings

Scanning following setting code to modify the min or max decode length of Micropdf code. Refer to page 19 “Decode Length Settings” .

Default setting min decode length is 1, max is 366.

Min decode length is 1, max is 366.



(925003.)

Min Decode Length



(925002.)

Max Decode Length

GS1 Composite Code



(926000.)

Default All GS1 Composite Code Settings

Enable/Disable



(9260011.)

Enable



(9260010.)

Disable

Decode Length Settings

Scanning following setting code to modify the min or max decode length of GS1 Composite Code. Refer to page 19 “Decode Length Settings” .

Default setting min decode length is 1, max is 2435.

Min decode length is 1, max is 2435.



(926004.)

Min Decode Length



(926003.)

Max Decode Length

Codablock A



(922000.)

Default All Codablock A settings

Enable/Disable



(9220011.)

Enable



(9220010.)

Disable

Decode Length Settings

Scanning following setting code to modify the min or max decode length of Codablock A code. Refer to page 19 “Decode Length Settings” .

Default setting min decode length is 1, max is 600.

Min decode length is 1, max is 600.



(922003.)

Min Decode Length



(922002.)

Max Decode Length

Codablock F



(923000.)

Default All Codablock F settings

Enable/Disable



(9230011.)

Enable



(9230010.)

Disable

Decode Length Settings

Scanning following setting code to modify the min or max decode length of Codablock F code. Refer to page 19 “Decode Length Settings” .

Default setting min decode length is 1, max is 2048.

Min decode length is 1, max is 2048.



(923003.)

Min Decode Length



(923002.)

Max Decode Length

8th Chapter: Other Function Settings

Software Version Display

Scanning following setting code" Version Display" and version information of software will be display in terminals.



(890005.)

Version Display

Image Mirror



(8960271.)

Enbale



*(8960270.)

Disable

Code Reverse



*(8910010.)

Do not Support Reverse Code



(8910011.)

Only Support Reverse Code



(8910012.)

Both Supported

If need to set supporting normal code and reverse code after scanning setting code" Only Support Reverse Code" ,You can scanning following setting code" Both Supported" .



(8910012.)

Both Supported

Safe Mode



(8000050.)

Setting Code Function ON



*(8000051.)

Setting Code Function OFF

QR Code Website Setting



(9950061.)

OFF



(9950060.)

ON

Code ID Prefix



(889002995C80.)

Add Serial Number as Prefix

Keyboard Language Settings

USA



(8210010.)

FINLAND



(8210012.)

SPAIN



(82100110.)

FRANCE



(8210013.)

GERMANY



(8210014.)

ITALY



(8210015.)

DENMARK



(8210018.)

NORWAY



(8210019.)

ICELAND



(82100175.)

CZECH



(82100115.)

HUNGARY



(82100119.)

SWEDEN



(82100123.)

ARAB



(82100191.)

RUSSIA



(82100126.)

SWITZERLAND_FRENCH



(82100129.)

SLOVENIA



(82100131.)

CROATIA



(82100132.)

ALBANIA



(82100135.)

SERBIA LATIN



(82100136.)

SERBIA_CYRILLI G



(82100137.)

CZECH_QWERTZ



(82100138.)

CZECH_QWERTY



(82100139.)

DUTCH



(82100111.)

ESTONIA



(82100141.)

LITHUANIA



(82100144.)

IRISH



(82100173.)

FAEROESE



(82100183.)

TURKEY_F



(82100127.)

TURKEY_Q



(82100124.)

JAPAN_ASCII



(8210083.)



(82100128.)

You need to scan following two setting codes when you want input Japanese in word software.

Chinese Keyboard Setting

In keyboard mode, you need to scan the following setting code "Chinese Keyboard" to open the Chinese keyboard (open by default), and then select the Chinese output format.



*(82100190.)

Chinese Keyboard

Chinese Output Format

The Chinese output format of keyboard mode is divided into GBK, UNICODE, and the default is GBK.

1. GPK format (Output in TXT, excel and wps), scanning following setting code " GBK"



*(8210131.)

GBK

2. UNICODE format (Output in word) , scanning following setting code " UNICODE"



(8210132.)

UNICODE

Case Switch



All Lowercase



All caps



No Case Switch



Case swap

9th Chapter:FAQ & Solutions

Q: Barcode scanner does not work?

Solution 1.It does not get electrified.

Solution 2.Using the wrong cable,please use the right cable from original factory

Solution 3.The cable interface is loose and reconnect.

Solution 4.Please checking if the trigger is ok.

Q: It can read codes,but can not transfer data to my device?

Solution 1.The cable interface is loose and reconnect.

Solution 2.Barcode scanner may not be configured to the correct terminal display.

Solution 3.If you are using a USB to RS232 cable and the data is garbled during data output, it may be the data receiving speed of the device does not match the output speed of the barcode scanner.

Q: It can read some code types,but some can not?

Solution 1. The barcode is defective. Try to scan the same type test barcode to check if it can be decoded.

Solution 2. The distance between the barcode scanner and the code is inappropriate. Please move the barcode closer or further away.

Solution 3.Please confirm that you have enabled the code type.

Q: It can not decode your code at some case?

Solution 1. Turn off the scanner,and making scanner and your device connected correctly. Testing again.

Solution 2.If you can not solve the problem with the scanner,please contact with us.

10th Chapter:Equipment Maintenance

1. Dirt and dust on the scanning window sometimes affect the normal operation of the barcode scanning device. When cleaning, you should use a good quality facial tissue to gently wipe, or use a soft cloth to clean. If the paper with poor paper quality is used for wiping for a long time, it will damage the surface finish of the window and affect the reading effect of the barcode scanning device.

2. The outer shell of the barcode scanning device can be wiped with a clean soft cloth. If necessary, a small amount of detergent can be added to the water and wiped with a soft cloth dipped in water.

3. Do not spray any liquid on the window.

4. The scanning window must be kept clean, and the supplier is exempt from warranty for damage caused by improper maintenance.

Appendix 1: Code Types ID Table

Code Type	HEX	ID
All Symbolologies	99	
Codabar	61	a
Code 11	68	h
Code 128	6A	j
Code 32 Pharmaceutical (PARAF)	3C	<
Code 39 (supports FullASCII mode)	62	b
TCIF Linked Code 39 (TLC39)	54	T
Code 93 and 93i	69	i
EAN	64	d
EAN-13(including Bookland EAN)	64	d
EAN-13 with Add-On	64	d
EAN-13 with Extended Coupon Code	64	d
EAN-8	44	D
EAN-8 with Add-On	44	D
GS1		
GS1DataBar	79	y
GS1 DataBar Limited	7B	{
GS1 DataBar Expanded	7D	}
GS1-128	49	l
2 of 5		
China Post (Hong Kong 2 of 5)	51	Q
Interleaved 2 of 5	65	e
Matrix 2 of 5	6D	m
NEC 2 of 5	59	Y
Straight 2 of 5 IATA	66	f
Straight 2 of 5 Industrial	66	f
MSI	67	g
Telepen	74	t
UPC		
UPC-A	63	c
UPC-A with Add-On	63	c
UPC-A with Extended Coupon Code	63	c
UPC-E	45	E
UPC-E with Add-On	45	E
UPC-E1	45	E
Add Newtologic Code ID	5C 80	
Add AIM Code ID	5C 81	
Add Backslash	5C 5C	
Batch Mode Quantity	35	5

Code Type ID Table

Code Type	HEX	ID
AllSymbologies	99	
Aztec Code	7A	z
Chinese Sensible Code (Han Xin Code)	48	H
Codablock A	56	V
Codablock F	71	q
Code 49	6C	l
Data Matrix	77	w
GS1	79	y
GS1Composite	79	y
GS1 DataBar Omnidirectional	79	y
MaxiCode	78	x
PDF417	72	r
MicroPDF417	52	R
QR Code	73	s
Micro QR Code	73	s

Postal Code

Code Type	HEX	ID
All Symbologies	99	
Australian Post	41	A
British Post	42	B
Canadian Post	43	C

Code Type	HEX	ID
China Post	51	Q
InfoMail	2c	,
Intelligent Mail Bar Code	4D	M
Japanese Post	4A	J
KIX (Netherlands) Post	4B	K
Korea Post	3F	?
Planet Code	4C	L
Postal-4i	4E	N
Postnet	50	P

Appendix 2: ASCII Transform

HEX	Dec	Character
00	0	NUL (Null char.)
01	1	SOH (Start of Header)
02	2	STX (Start of Tex)
03	3	ETX (End of Tex)
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 (Cance)
19	25	EM (End of Medium)
1a	26	SUB (Substitute)
1b	27	ESC (Escape)
1c	28	FS (File Separato)
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	\ (BackSlash)
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 3: Special Setting Codes



(K0K.)

0



(K1K.)

1



(K2K.)

2



(K3K.)

3



(K4K.)

4



(K5K.)

5



(K6K.)

6



(K7K.)

7



(K8K.)

8



(K9K.)

9



(KAK.)

A



(KBK.)

B



(KCK.)

C



(KDK.)

D



(KEK.)

E



(KFK.)

F



(800002.)

Save



(800000.)

Abandon

Note: If there is an error when scanning letters or numbers (before scanning the "Save" barcode), please scan the "Abandon" barcode, and then scan the correct number or letter corresponding to the setting code, and finally scan the "Save" barcode to save the settings

Appendix 4: ASCII Transform In Keyboard Operation

hexadecimal	decimal system	CTRL+X	explain	
00	0	CTRL+@		
01	1	CTRL+A	Select All	
02	2	CTRL+B	Bold	
03	3	CTRL+C	Copy	
04	4	CTRL+D	Font Format	
05	5	CTRL+E	Align Center	
06	6	CTRL+F	Find	
07	7	CTRL+G	Positioning	
08	8	CTRL+H	Replace	
09	9	CTRL+I	Italic	
0a	10	CTRL+J	Justify	
0b	11	CTRL+K	Hyperlink	
0c	12	CTRL+L	Align Left	
0d	13	CTRL+M	Left Indent	
0e	14	CTRL+N	New Creation	
0f	15	CTRL+O	Open	
10	16	CTRL+P	Print	
11	17	CTRL+Q		
12	18	CTRL+R	Align Right	
13	19	CTRL+S	Save	
14	20	CTRL+T	First Line Indent	
15	21	CTRL+U	Underline	F12
16	22	CTRL+V	Paste	F1
17	23	CTRL+W	Close Window	F2
18	24	CTRL+X	Cut	F3
19	25	CTRL+Y	Repeat	F4
1a	26	CTRL+Z	Undo	F5
1b	27	CTRL+[F6		
1c	28	CTRL+\ F7		
1d	29	CTRL+] F8		
1e	30	CTRL+^ F9		
1f	31	CTRL+_ F10		
7f	32	CTRL+		



Version number