BARCODE SCANNER

# User Manual

Customer Service:

**server@nadamoo.cn**

**nadamoo@126.com**

V2.

In order to correctly use the bar code scanner, please read the instruction carefully and do not arbitrarily scan the setting codes, otherwise some settings may not be available temporarily.

Please note that this scanner is a laser bar code scanner, it can not scan barcode **on screen.** All the bar code on the digital manual should be printed to scan!

Please keep this instruction for reference in the future.

If you have any question or concern about the operation of the scanner, please contact us at one of the following email address:

**server@nadamoo.cn**

**nadamoo@126.com**

You should write down the model & the specific scenario and consult us , when you find the scanner is abnormal.

# Contents

# Technical Parameter

| | |
|---|---|
| Mfr P/N | |
| Connection technology | 2.4 GHz Radio Wireless+Wired |
| Max Transmission Range | 100m in 2.4 GHz wireless mode |
| Memory | 100000 barcodes |
| Battery capacity | 1400mAh |
| Charging power | DC 5V 500mA |
| Light source | 650±20nm VLD |
| LED life | 12000 hours |
| Button life | 8000,000 times |
| Resolution | 3mil |
| Scanning width | 30cm |
| CPU | ARM 32-bit Cortex |
| Bit Error rate | 1/20million |
| Printing Contract | >25% |
| Decoding speed | 300 times/sec |
| Scanning angle | rotor angel±30°，inclination± 45°，declination ± 60° |
| Drop test | 2.0m |
| Certificate | CE，FCC，RoHS ，IP54 |
| Depth of  Field | 3mil | 2mm-100mm |
| | 10mil | 2mm-350mm |
| | 15mil | 5mm-500mm |
| | 30mil | 10mm-800mm |
| Applicable 1D barcode | UPC/EAN、Code128、Code39、Code 39Full ASCII、Coda bar、industrial /Interleaved 2 of 5, Code93、MSI、Code11、ISBN、ISSN、etc. |

## Packing list

•Barcode scanner*1
•USB Cable*1
•Instruction Manual*1
•USB Wireless Receiver*1


## Battery & Charging

The scanner is powered by 1400mAh rechargeable battery.
Please charge the scanner at least 30 minutes before use to ensure that the scanner has enough power.

Insert one end of USB cable into the bottom of scanner, and insert another end to computer USB interface or 5V DC USB interface adapter.

Charging indicator:
The red indicator light on the top of the scanner will slightly strobe during charging.
The red light will go off when the scanner is fully charged.

NOTE:
1. Please use computer USB interface or 5V DC power adapter for charging, the abnormal power adapter will cause permanent damage to scanner and battery.

2. When the top red indicator light cyclically flashes three times, it means the battery is at low power. Please stop using and recharge it.

# *Quick Start Guide*

When the USB cable is inserted in, the scanner will automatically switch to wired mode.

Connection mode indication:

When the light on the top of the scanner turns green, it indicates the scanner is in 2.4 GHz wireless mode.

It is suggested to use 2.4GHz wireless mode/ wired mode on the computer

## 2. 2.4GHz wireless mode quick start guide

--**To use the scanner on computer**

**STEP1.** Scan the following code "2.4GHz Wireless Mode" to 2.4Ghz wireless mode. When the light on the top of the scanner turns green, it means the scanner successfully changes mode to 2.4GHz Wireless Mode.



2.4GHz wireless mode

**STEP2.** Plug the USB receiver in to USB port of your computer, within 30 seconds, scan the code "match" to pair the scanner with the USB receiver.



Match

Note: 30 seconds after the USB receiver is plugged, the scanner cannot match the USB receiver. If the pairing fails, the scanner will emits sound like "di en" . Please unplug the USB receiver and plug it again, then scan the code "match "

**STEP3**. Scan the code "instant upload mode" to set the scanner to instantly upload the barcode



Instant upload mode

**STEP4.** Test the scanner using notepad , put the cursor in the blank and then scan a barcode to see if the barcode comes up.

### 3.Wired mode quick start guide

**STEP1.** Connect the scanner to your computer via USB cable. When the USB cable is inserted in, the scanner will automatically switch to the wired mode by default.

**STEP2.** Open notepad on computer, move cursor to the blank, scan a barcode to see if it can be uploaded.

**NOTE :**
In the case where the current mode is  2.4G  mode，if the USB cable is inserted in，the scanner will automatically switch to wired mode，  the light of the scanner is stay blue.

In the case where the current mode is 2.4G Wireless mode，  if the USB cable is inserted in，  the scanner will automatically switch to wired mode，  the light of the scanner is stay green.

## *FAQs:*

**Q1**. If i scan a product barcode, will it include the name of the product in the file automatically?
**Answer:**
The scanner works like a keyboard. The scanner does not interpret what the bar code is, it just "types" out a string of alphabet numeric characters that the bar code represents.

it's up to the database software you are using to interpret what that string of characters means. Once you acquire the barcodes, you have to correlate them to something more meaningful by either purchasing a software service that will interpret the barcode and relate it to a product, or you can use your own internal inventory system to assign the barcodes to specific products.
After creating the relationship between your barcode and the corresponded information ,when you enter the barcode into the software by the scanner,your software will look up the barcode and then output the related information of your product.

**Q2**. Why all barcode can not be read?

**Answer：**

After resetting the scanner into factory settings, the scanner was set to 2.4G mode by default.

If you want to use it in 2.4G wireless mode, please connect the scanner to you computer via USB receiver, and then scan the following codes "2.4GHz Wireless mode" "Match" "instant upload mode".

There may be some other reasons for this issue. Please troubleshoot the product according to the troubleshooting instruction on page 12.

**Q3.** Some barcodes can not be read, why?

**Answer：**

A. Incomplete and unclear barcodes might not be read.

B. It is possible that the setting is off by default for some barcode types which are not commonly used. You need activate a specific barcode type to get it working. Please feel free to contact our Customer Service Team for further assistance if you don't know the exact type of barcode that you are referring to

**Q4.** Why does scanner not read the barcode exactly. When I use the scanner to read a barcode of an item, I get a different result from the barcode itself.

**Example 1**, There are two separate barcodes together. It scanned the first 12 digits in the barcode but not the last five.

**Solution：** Please scan the code " UPC/EAN extra code-Enable" on page 32.

**Example 2**, The original barcode is " abc12345 " , the scanning result is "+A+B+C+D12348" , the scanner put "+" between character.

**Solution：** Please scan the code "Code39 FullASCII-Enable " on page 32.

If that is not your case, please send us a clear picture of the barcode and the result you

get, our customer service will help you to solve the problem.

**Q5.** Is there any barcodes to remove auto-enter after every scanning?
**Answer:**

To remove the auto-enter, please read the code "disable suffix" on page 29.

**Q6.** Why does scanner not read the first digit of UPCE barcode.
 **Answer:**

To enable the scanner to read the first digit of UPCE, read the code "Show UPCE system digit" on page 31.

**Q7.** How to add TAB?
**Answer:**

To add TAB, read the code "TAB" on page 29.

## *Troubleshooting (2.4Ghz wireless Mode)*

| Problem | Possible Reason | Solution |
|---|---|---|
| Insert the USB receiver into the PC 's USB port, the receiver' s light does not light up. | The PC' s USB port is damaged. | Connect the USB receiver to another USB port. |
| | The USB receiver is damaged. | Contact us for the replacement. |
| Power on the scanner, the scanner has no reaction. the buzzer does not beep, the green light on the top of scanner does not turn on, the red scanning laser does not show up. | The battery run out. | Recharge the scanner. |
| The scanner can not hold the charge. | The PC' s USB port isdamaged. | Using another USB port for charging. |
| | The USB cable is damaged. | Contact us for the replacement. |
| Power on the scanner, the buzzer beeps, the green light on the top of scanner will be on, the red scanning laser does not show up or become a dot. | The laser head is damaged. | Contact us for the replacement. |
| Scanner and USB receiver are all in good condition. But the barcode can not be sent to my computer. | The scanner failed to match the USB receiver .. | Unplug the receiver and plug it in to PC' s USB port,  and scan the following  codes: |
| | The scanner was set to storage mode, scanned data will be kept in the buffer of scanner. | "2.4GHz wireless mode" "match" "instantly upload mode" |

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# *Optional Function Settings*

Settings of the barcode scanner can be changed by scanning the setup barcodes included in this manual.

### 1. Switch Connection Mode

There are 2 operations to switch the mode.

1) Scan desired code to select the mode.



2.4GHz wireless mode

2) Press and hold the button for 10 seconds to change the mode

**Connection mode indication:**

When the light on the top of the scanner turns green, it indicates the scanner is in 2.4 GHz wireless mode.

### 3. 2.4GHz Wireless Mode Pairing Setting

In 2.4GHz wireless mode, two kinds of pairing modes are supported.

**3.1 One scanner to one receiver**:  One scanner only sends barcode to one receiver.



Receiver A          Scanner A

Pairing operation:
Plug the USB receiver into your computer , scan the code "match " to pair the scanner with the USB receiver



Match

Pairing indication:
(1) If the pairing succeeds, the buzzer beeps "DI-en""di di di"
(2) If the pairing faileds, the buzzer beeps "DI---en"

NOTE: 30 seconds after the USB receiver is inserted, the scanner cannot match the USB receiver.   If the pairing failed, please unplug the USB receiver and plug it again, then scan the code "match".

Several units can work independently with different computers in the same area. They won't interface with each other during work.

If you want to use them on multiple computers, each with own scanner and receiver. Please follow the setps

(1) Plug the USB receiver A into PC A.
(2) Scan the code "match" using scanner A to pair the scanner A with the receiver A.
(3) 30 seconds after the USB receiver A is plugged (or unplug the receiver A), plug the USB receiver B into PC B USB port
(4) Scan the code "match" using scanner B to pair the scanner B with the receiver B.
……



Match



Receiver A          Scanner A



Receiver B          Scanner B
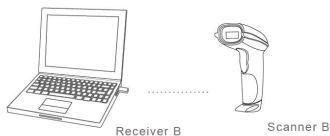
### 3.2. Max.32 Scanner - to - One receiver

Multiple scanners send barcode to one USB receiver.   One USB receiver can connect to 32 scanners at most.

Pairing operation:
 (1) Plug the USB receiver A into PC 's USB port
 (2) Scan the code  "match" using scanner A to pair the scanner A with the receiver A
 (3) Unplug the USB receiver A and plug it to PC 's USB port again
 (4) Scan the code  "match" using scanner B to pair the scanner B with the receiver A
…



Match
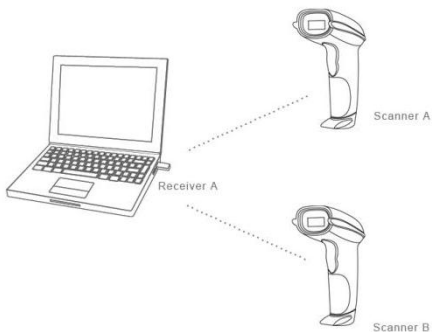
## 4. Upload Mode Setting

Two kinds of upload modes are supported in 2.4GHz wirelelss mode.


**4.1. Instant Upload Mode** : Read barcodes and upload it straight to the file you have opened.

**\*\*** To set the scanner to upload barcode instantly, scan the following code:

Instant upload mode


Scanning indication:

(1) The blue/green indicator light flashes once and the buzzer beeps once when the barcode is uploaded successfully.

(2)The red indicator light flashes once and the buzzer emits sounds like slow "DI---en" when the barcode can not be uploaded.

*Note:*

The transmission speed between every character can be changed by scanining the following code. If some characters are missing, please set the scanner to lower transmission speed.   The higher the value, the slower the speed is.


Speed 00 *   (wireless default)

Speed 05

Speed 10

Speed 15

Speed 20

```
||| || ||||||||| ||||| ||| ||| ||||||||||
```
Speed 40

```
||| || ||||||||| ||||| ||| ||| ||||||||
```
Speed 50

```
||| || ||||||||| ||||| | |||| ||| |||
```
Speed 60

**4.2. Storage mode :**    Read barcodes and store the barcodes in scanner's own memory. You can upload the data to computer in batchs when you need them. Internal storage saves up to 100,000 barcodes.

Note:   In storage mode, the barcode will be stored in the scanner and will not come up on your computer instantly. The barcode comes up on your computer only when you scan the settings code "upload data"

**\*\*** To convert scanner from "instant upload mode" to "storage mode", please scan the following barcode  "Storage mode ".

```
||| || ||||||||||||||||||||||||| |||
```
  Storage mode

**\*\*** Put the cursor in the blank, scan 'Upload Data' barcode to upload data from memory . (for storage mode only)

```
||| || ||||||||||||||||||||||||| |||
```
  Upload data

**\*\*** Put the cursor in the blank, scan  "Show total storage" barcode to show total number of stored barcode. (for storage mode only)

||||  ||  ||||||||||||||||||  ||||  |||

Show total storage

** Scan the barcode "Zero clearing" to clear all stored barcode. (for storage mode only).

||||  ||  ||||||||||||||||||||  |||  |||

Zero clearing

Scanning indication:
(1) The blue/green indicator light flashes once and the buzzer rang a fast "DI-en" when the barcode is saved successfully in the built-in memory of the scanner
(2) The red indicator light flashes once and the buzzer rang a slow "DI---en" when the barcode can not be saved in the built-in memory of the scanner, because the space of memory is not enough and cannot store any more barcodes. Please upload the saved barcode by scanning the code "Upload Data" and then clear the saved barcode by scanning code "zero clearing".

*Note 1:*
In storage mode, the transmission speed between every barcode can be changed by scanining the following code. The higher the value, the slower the speed is.

*Note 2:*
If the character upload speed（on page 19） is set to a slower speed，and the barcode upload speed is set to a higher speed. When uploading data in storage mode, the data maybe be lost. If some character or barcode are missing, please set the scanner to lower barcode transmission speed.

|||  ||  |||||||||||||  ||  ||||||||  |||          |||  ||  |||||||||  ||  |||  ||||  |||

Speed 000*   (wireless default)                    Speed 005

```
|||  ||| ||||||| ||| ||| | ||| ||| |||||| |||
```
Speed 040

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```
Speed 050

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```
Speed 060

## 5. **Beep Setting**

** Select desired decoding beep mode

```
||| || ||||||| ||||||| ||||||||| |||
```
Low volume

```
||| || ||||||| |||| ||| ||||| ||| |||
```
Medium volume

```
||| || ||||| ||||||| ||||||||||| |||
```
High volume (default)

```
||| || |||||| || |||| |||||||| || |||
```
Beep-Off

** Select desired start-up beep mode

```
||| || |||||| | |||| ||| || |||||| |||
```
High volume (default)

```
||| || |||||||| | || |||||||||| ||| |||
```
Medium volume

```
||| || ||||| ||| |||||| |||| ||| |||
```
Low volume

```
||| || ||||||| ||||||| ||||||||| |||
```
Beep-Off

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## 6. Scanning Mode Setting

2.4GHz wirelelss mode.

### 6.1. Manual trigger mode (default) :

User press the trigger, the scanner will emit a red light to read the barcode. When user release the tigger, the red light will go off.

** Scan the following codes to set the scanner to Manual trigger mode .



Manual trigger mode (default)

### 6.2. Continuous scanning mode

There's no need to click the trigger in this mode. The red light of the scanner will be on all the time.

** Scan the following codes to set the scanner to Continuous Scanning Mode.



Continuous Scanning Mode

## 7. Battery Remaining

Put the cursor in the field, scan the following barcode, the battery remaining tip "DumpEnergy: xxx%" will comes up in the location of cursor



Battery Reserve

## 8. Interface Setting

Two kind of Interface are supported.

### 8.1. USB-HID mode

In the HID protocol, there are 2 entities: the "host" and the "device".
The host communicates with the device and receives input data from the device on actions performed by the human.
The most common example of a "host" is a PC.
The "device" is the entity that directly interacts with a human, such as a keyboard or mouse.

\*\* To set the scanner as a keyboard to enter the barcode , please read the following code "USB_HID(default)"



USB_HID (default)

### 8.2. USB virtual COM mode

In USB virtual COM mode, when you pull the trigger, the barcode won't come up on universal software like notepad, excel, word etc.

The scanner needs to work with driver and serial software, please contact us if you need to set it to USB virtual COM mode,  we will send you the driver and tutorial.

## 9. Identity Barcode Type

This setting is to identify what type of the barcode is, follow the below steps to confirm:

Situation 1: Scan the code "Add ID front-on" below, then scan your goal barcode, there will be a character BEFORE the barcode you scanned, and this character states your Barcode Type. After that, if you don't need this prefix any more, please scan the code "Add ID front-Off (default)" to hide it.

Add ID front - ON          Scan Goal Barcode          Add ID front-Off

| Barcode type | ID | Barcode type | ID |
|---|---|---|---|
| CODE 93 | h | MSI/PLESSEY | f |
| CODABAR | k | EAN-8 | d |
| UPC-A | b | EAN-13 | e |
| UPC-E | c | INTERLEAVED 2/5 | i |
| ISBN | f | CODE 11 | m |
| CODE 39 | a | CODE 128 | g |

## 10. Keyboard Language Setting

The scanner support 25 international keyboards:
You are suggested to set the keyboard type of the scanner to be in agreement with that in real use by scanning the correspondent barcode listed below.

||| || ||||||||||||| |||| |||| ||
UNITED STATES   (default)

||| || |||||||||||| |||| |||| ||
FRENCH

||| || |||||||||||| |||| ||| | ||
SERBIA/YUGOSLAVIA

||| || ||||||||||||| ||| || ||
BELGIUM

||| || |||||||||||| ||| |||| | ||
GERMANY

||| || |||||||||||| ||||| ||| | ||
SLOVENIA

||| || ||||||||||||| |||| |||| ||
BRAZIL

||| || |||||||||||| |||| ||| | ||
HUNGARY

||| || |||||||||||| |||| ||| | ||
SPAIN

||| || |||||||||||| |||| || ||| ||
CANADIAN-FRENCH

||| || |||||||||||| ||| ||| ||
ITALY

||| || |||||||||||| |||| |||| ||
SWEDEN

||| || |||||||||||| |||| ||| | ||
CROATIA

||| || |||||||||||| |||| |||| ||
LATIN AMERICA

||| || ||||||||||||| ||||||||||| |||

SWITZERLAND (FRENCH)

||| || ||||||||||||| |||||| ||| |||

NETHERLANDS

||| || |||||||||||||| |||||| ||| ||

CZECHOSLOVAKIA (SLOVAK)

||| || |||||||||||||| |||||| ||| |||

UNITED KINGDOM

||| || ||||||||||||| |||||| | ||| ||

POLAND

||| || |||||||||||||| ||| |||| |||

FINLAND

||| || |||||||||||||| |||| || ||||| ||

CZECHOSLOVAKIA (CZECH)

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SWITZERLAND (GERMAN)

||| || ||||||||||||| ||||||| | || ||

NORWAY

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DENMARK

||| || |||||||||||||| |||||| || | ||

UNIVERSAL

||| || |||||||||||||| ||||| || || ||

PORTUGAL

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## 11. Case Sensitivity Setting

The scanner can change all the letter cases of barcode into uppercase or lowercase.

Letter case of barcodes can be altered through scanning correspondent bar code below.


All Capital


All lowercase


Swap Capital/ lowercase


Cancel capital/lowercase settings

## 12. Power Off Setting

The scanner will be powered off if there is no operation on it in 2 mins by default. Short press on the trigger can wake it up.

Scan one of the following barcode to set the time interval,when it's idle exceeding the time interval you set,the scanner will be power off.


10s Automatic power off


50s Automatic power off


5mins Automatic power off


30mins Automatic power off


Power off


Never power off

### 13. Restore factory setting

To set the scanner to factory settings, please scan the code:



Restore factory setting

### 14. End character setting

By default，the scanner is sending a 'carriage return' after scanning a code (the same as pressing the 'enter' key) .



CR/ENTER (default)



Disable suffix



Tab

To add Enter Key, please read code " CR/ENTER(default) "
To disable Carriage Return,please read code " Disable suffix "

To add TAB, please read code "TAB"
To disable TAB, please read thes code " Disable suffix "

Note: if you need other Terminator, please contact us.

### 15. Barcode Setting

The code ending with word "*" is the default settings.

**UPCA:**

‖‖‖ ‖ ‖‖‖‖‖‖ ‖ ‖‖‖ ‖‖‖ ‖‖
UPCA-Enable*

‖‖‖ ‖ ‖‖‖‖‖‖‖‖‖ ‖ ‖‖ ‖‖
UPCA-Disable

‖‖‖ ‖ ‖‖‖‖‖‖‖‖‖ ‖ ‖‖ ‖‖
Show UPCA check digit*

‖‖‖ ‖ ‖‖‖‖‖‖‖‖‖ ‖ ‖‖ ‖‖
Hide UPCA check digit

‖‖‖ ‖ ‖‖‖‖‖‖‖‖‖ ‖ ‖‖ ‖‖
Show UPCA system digit*

‖‖‖ ‖ ‖‖‖‖‖‖‖‖‖ ‖ ‖‖ ‖‖
Hide UPCA system digit

‖‖‖ ‖ ‖‖‖‖‖‖‖‖‖ ‖ ‖‖ ‖‖
UPCA to EAN13-Enable

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UPCA to EAN13-Disable*

**UPCE**

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UPCE-Enable*

‖‖‖ ‖ ‖‖‖‖‖‖‖‖‖ ‖ ‖‖ ‖‖
UPCE- Disable

| | |
|---|---|
| ‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖ | ‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖ |
| Show UPCE check digit* | Hide UPCE check digit |
| ‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖ | ‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖ |
| Show UPCE system digit | Hide UPCE system digit* |
| ‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖ | ‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖ |
| UPCE to UPCA-Enable | UPCE to UPCA-Disable* |

**EAN13**

| | |
|---|---|
| ‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖ | ‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖ |
| EAN13-Enable* | EAN13-Disable |
| ‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖ | ‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖ |
| Show EAN13 check digit* | Hide EAN13 check digit |
| ‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖ | ‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖ |
| EAN13 to ISBN-Enable | EAN13 to ISBN - Disable* |
| ‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖ | ‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖ |
| EAN13 to ISSN - Enable | EAN13 to ISSN - Disable* |

**EAN8**

IIIII EAN8 - Enable*

IIIII EAN8-Disable

IIIII Show EAN8 check digit*

IIIII Hide EAN8 check digit

**UPC/EAN Extra code**

IIIII UPC/EAN extra code-Enable

IIIII UPC/EAN extra code-Disable*

**Code39**

IIIII Code39-Enable*

IIIII Code39-Disable

IIIII Code39 FullASCII-Enable

IIIII Code39FullSCII-Disable*

IIIII Show Code39 start/stop digit

IIIII Hide Code39 start/stop digit*

**Code32**

Code32- Enable

Code32-Disable*

**Code128**

Code128-Enable*

Code128-Disable

**Code93**

Code93-Enable*

Code93-Disable

**Code11**

Code11-Enable*

Code11-Disabel

**CODABAR**

CODABAR-Enable*

CODABAR-Disable

| | |
|---|---|
| ‖‖‖ ‖ ‖‖‖‖‖‖‖‖‖‖‖ ‖ ‖‖‖ ‖‖‖<br>Show CODABAR start/stop digit | ‖‖‖ ‖ ‖‖‖‖‖‖‖‖ ‖ ‖‖‖ ‖‖‖<br>Hide CODABAR start/stop digit |

**Industrial 2 of 5**

| | |
|---|---|
| ‖‖‖ ‖ ‖‖‖‖‖‖‖‖‖‖‖‖ ‖ ‖‖‖<br>Industrial 2 of 5 -Enable* | ‖‖‖ ‖ ‖‖‖‖‖‖‖‖ ‖ ‖‖‖ ‖‖‖<br>Industrial 2 of 5 -Disable |

**Interleaved 2 of 5**

| | |
|---|---|
| ‖‖‖ ‖ ‖‖‖‖‖‖‖‖‖‖ ‖ ‖‖ ‖‖‖<br>Interleaved 2 of 5 -Enable* | ‖‖‖ ‖ ‖‖‖‖‖‖‖‖ ‖‖‖‖‖ ‖‖ ‖‖‖<br>Interleaved 2 of 5 -Disable |

**MSI**

| | |
|---|---|
| ‖‖‖ ‖ ‖‖‖‖‖‖‖‖‖‖‖ ‖‖‖ ‖‖‖<br>MSI-Enable | ‖‖‖ ‖ ‖‖‖‖‖‖‖‖ ‖‖‖‖ ‖‖‖<br>MSI-Disable |

## 16. Insert and delete character

The barcode scanners permit special characters to be added at the beginning (prefix) or end (suffix) of the scanned barcode.   The character also can be deleted.

**First step:   Scan one of the following setup code to choose the event.**

Insert character

Delete character

**Second step:  Scan one of the following setup code to choose the barcode type.**

| | |
|---|---|
| All barcode type | UPCE |
| UPCA | EAN8 |
| EAN13 | ISBN/ISSN |
| Code39 | Code128 |
| Code93 | Codabar |

| ||||| ||||||||||||||||||| | | ||||| |||||||||||||||||| | |
|---|---|
| Interleaved 2 of 5 | Industrial 2 of 5 |
| ||| | |||||||||||||||||| ||| | ||||| ||||||||||||||| |
| MSI | Code11 |
| ||| ||| ||||||||||||||||| | ||| | |||||||||||||||| | |
| China post | GS1D |
| ||| ||| |||||||||||||||| | ||| | |||||||||||||||| |
| GD1L | GS1E |
| ||| ||| ||||||||||||||||||||| | |
| Code32 | |

**Note：** if you do not choose the barcode type, the setting will take effect for all barcode type by default.

**Third step : Scan one of the following setup code to choose the data group.**

| ||| ||| ||||||||||||||||||| | | ||| ||| ||||||||||||||||||| |
|---|---|
| Group 1 | Group 2 |
| ||| ||| |||||||||||||||||| | | ||| | |||||||||||||||||||| | |
| Group 3 | Group 4 |

Group 5


Group 6


Group 7


Group 8

**Note 1**: if you do not choose the data group, the scanner will take "Data group 1" as default setting.

**Note 2:**
*The data group is used to distinguish between different setting events.*
*it work on the following circumstances:*

*1).Differentiating the setting for different barcode types*
*2).Distinguish add / delete prefix or suffix*

*Different events can take effect at the same time.*

**Example 1 :**
*If you want to put "A" before the Code39 type barcode, put "B" before the Code128 type barcode .*
*The setting steps is :*
*Insert charater> Code39>**Data group 1** > Before barcode> 065 A> Saving settings*
*Insert charater> Code128>**Data group 2** > Before barcode> 066 B> Saving settings*

*After that,*
*when the scanner read a Code39 barcode, it will add " A" before the barcode. When it read a Code128 barcode, it will add "B" before the barcode.*
*when it read other type barcode ,like UPC, it will not add any character.*

**Example 2:**

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*If you want to put "A" before barcode, put "B" after barcode.*
*The setting steps is：*
*Insert charater > All barcode type > **Data group 1** > Before barcode > 065 A > Saving settings*
*Insert charater> All barcode type > **Data group 2** > After barcode > 066 B> Saving settings*

*After that,*
*when the scanner read barcode 123456789, the barcode received by the computer will be A123456789B.*

**Fourth steps： Scan one of the following setup code to choose the position**



Before barcode



After barcode

**Fifth steps： Choose the character you want to add or the digit you want to delete.**

Character table please refer to ASCII code table on page 35.

**Note 1:**
Ten characters can be added or deleted at most.

**Note 2:**
For the character deleting event, below is the corresponding deleting characters table.

| | |
|---|---|
| 001 SOH | One character |
| 002 STX | Two characters |
| 003 ETX | Three characters |

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| 004 EOT | Four characters |
| 005 ENQ | Five characters |
| 006 ACK | Six characters |
| 007 BEL | Seven characters |
| 008 Back Space | Eight characters |
| 009 HT/TAB | Nine characters |
| 010 LF | Ten characters |

**Sixth steps:  Scan the below code to save the setting**



Save setting

**To remove the insert setting,  scan the following code in order**



Insert character



Clear setting

**To remove the insert setting,  scan the following code in order**



Delete character



Clear setting

# Insert or delete operation for example

In the process of setting, scan the irrelevant barcode, the scanner will exit setting status.

**Example 1: Insert character: 123456789(Code128)**

| Insert Ab before barcode | Insert Cd after the third digit of the barcode | Insert Ef after barcode |
|---|---|---|
| | 1, Insert Characters | |
| | 2, All barcode types | |
| | 3, Data Group 1 | |
| 4, Before barcode | 003    ETX | After Barcode |
| 5, 065    A | 067    C | 069    E |
| 6, 098    b | 100    d | 102    f |
| Each data group can insert within 10 characters | | |
| | 7, Save Settings | |
| Setup result | | |
| Ab123456789 | 123Cd456789 | 123456789Ef |
| Removal of insert character settings, Please scan in turn | Insert Characters | Clear settings |

Ⅰ: Can set different bar code type, make this setting to this kind of bar code is effective

Ⅱ: Can set different data group, make different Settings take effect at the same time

**Example 2: Delete Character,** 123456789(Code128)

| Delete one digit before barcode | Delete two digit after the third digit of the barcode | Delete three digit after barcode |
|---|---|---|
| 1, Delete characters | | |
| 2, All barcode types | | |
| 3, Data Group 1 | | |
| 4, Before barcode | 003 ETX | After Barcode |
| 5, 001 SOH | 002 STX | 003 ETX |
| 6, Save Settings | | |
| Setup result | | |
| 23456789 | 1236789 | 123456 |
| Removal of delete character settings, Please scan in turn | Delete characters | Clear settings |
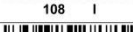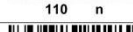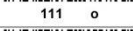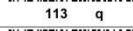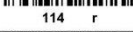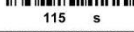
Ⅰ: Can set different bar code type, make this setting to this kind of bar code is effective

Ⅱ: Can set different data group, make different Settings take effect at the same time

## ASCII Table

| | | |
|---|---|---|
| 000 NUL/SP | 001 SOH | 002 STX |
| 003 ETX | 004 EOT | 005 ENQ |
| 006 ACK | 007 BEL | 008 Back Space |
| 009 HT/TAB | 010 LF | 011 VT |
| 012 FF | 013 CR/ENTER | 014 SO |
| 015 SI | 016 DLE | 017 DC1 |
| 018 DC2 | 019 DC3 | 020 DC4 |
| 021 NAK | 022 SYN | 023 ETB |
| 024 CAN | 025 EM | 026 SUB |
| 027 ESC | 028 FS | 029 GS |
| 030 RS | 031 US | 032 SP |
| 033 ! | 034 " | 035 # |
| 036 $ | 037 % | 038 & |
| 039 ' | 040 ( | 041 ) |
| 042 * | 043 + | 044 , |
| 045 - | 046 . | 047 / |

| | | |
|---|---|---|
| 048 0 | 049 1 | 050 2 |
| 051 3 | 052 4 | 053 5 |
| 054 6 | 055 7 | 056 8 |
| 057 9 | 058 : | 059 ; |
| 060 < | 061 = | 062 > |
| 063 ? | 064 @ | 065 A |
| 066 B | 067 C | 068 D |
| 069 E | 070 F | 071 G |
| 072 H | 073 I | 074 J |
| 075 K | 076 L | 077 M |
| 078 N | 079 O | 080 P |
| 081 Q | 082 R | 083 S |
| 084 T | 085 U | 086 V |
| 087 W | 088 X | 089 Y |
| 090 Z | 091 [ | 092 \ |
| 093 ] | 094 ^ | 095 _ |

| | | |
|---|---|---|
| 096 ` | 097 a | 098 b |
| 099 c | 100 d | 101 e |
| 102 f | 103 g | 104 h |
| 105 i | 106 j | 107 k |
| 108 l | 109 m | 110 n |
| 111 o | 112 p | 113 q |
| 114 r | 115 s | 116 t |
| 117 u | 118 v | 119 w |
| 120 x | 121 y | 122 z |
| 123 { | 124 | | 125 } |
| 126 ~ | 127 DEL | 128 F1 |
| 129 F2 | 130 F3 | 131 F4 |
| 132 F5 | 133 F6 | 134 F7 |
| 135 F8 | 136 F9 | 137 F10 |
| 138 F11 | 139 F12 | 140 l_Shift on |
| 141 l_Shift off | 142 r_Shift on | 143 r_Shift off |

| | | |
|---|---|---|
| 144 l_Alt on | 145 l_Alt off | 146 r_Alt on |
| 147 r_Alt off | 148 l_Ctrl on | 149 l_Ctrl off |
| 150 r_Ctrl on | 151 r_Ctrl off | 152 /(KP) |
| 153 *(KP) | 154 -(KP) | 155 +(KP) |
| 156 _(KP) | 157 Enter(KP) | 158 0(KP) |
| 159 1(KP) | 160 2(KP) | 161 3(KP) |
| 162 4(KP) | 163 5(KP) | 164 6(KP) |
| 165 7(KP) | 166 8(KP) | 167 9(KP) |
| 168 Inert | 169 Delete | 170 Home |
| 171 End | 172 Page Up | 173 Page Down |
| 174 Up | 175 Down | 176 Left |
| 177 Right | 178 Center | 179 Insert |
| 180 Delete | 181 Home | 182 End |
| 183 Page Up | 184 Page Down | 185 Up |
| 186 Down | 187 Left | 188 Right |
| 189 | 190 Num Lock | 191 caps lock |
| 192 scroll lock | | |

**FCC STATEMENT**

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.