

Ring Barcode Scanner

User' s manual

BROCHURE

Precautions

1. Please read the user manual carefully before using this barcode scanner.
2. The working voltage of this barcode scanner is 3.3V, charging voltage 5V. Please use our original USB cable and AC power adapter to ensure the scanner is working properly.
3. Copyright and Patent Notice Our company reserves the copyright, software copyright and sufficient patents of the ring barcode scanner and its accessories(including firmware, MR Configurator,illustration documents,appearance and so on.)
4. Our company reserves all rights, reserves the right to make any changes to the product to improve its reliability, function or design. Our company shall not be liable for applications or use of any product or circuit with our scanner, or any liability arising therefrom or in connection with any other applications described herein.
5. Our wireless barcode scanner accessories:
A: standard package: :barcode scanner (1 piece), AC power adapter , USB cable (1 piece), user manual (1 piece).
6. The contents of this manual are subject to change without prior notice.

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Introduction

The series of barcode scanner produced by our company feature as strong light source, enhanced long-distance scanning technology. It can read the damaged, stained and poor printed barcode fast under different ambient light conditions.

It is durable in use, since it is protected by the industrial safety technique. High volume buzzer is another hint of success scanning besides LED light in the noisy industrial environment.

Features

Wired , wireless and bluetooth triple-mode freely switching.

Large capacity storage, safe and reliable.

Stores barcodes more than 50000pcs off-line scanning.

Unique power management system, ultra-long standby time.

Rich symbologies supported

Adopting imported trigger button, long lifespan, fitting perfectly in your hand for comfortable use.

Support Android/iOS devices/Windows

Support HID、SPP、BLE protocol

Mini size, fashion design, and portable

Ultra low power consumption and standby time setup available

Bluetooth transmission distance: 15m (indoor)

Support upload data and charge the battery via USB cable at the same time.

Application

* Applicable to Business (electrical, book, clothing, medicine, cosmetics, etc.), retail industry, postal service, telecommunications industry, warehousing, logistics industry, public security system, customs systems, banking system, medical system.

* Compatible with Microsoft, Android, Linux and other operating systems and bluetooth protocol

* Support multi-national keyboard language

Scanner Execution Standards

Wireless protocol: bluetooth 2.4G

Memory: 16Mb

Processor: ARM Cortex 32bits

Bluetooth version: Bluetooth 4.1Module

Supported symbologies: 1D: Codabar, Code 11, Code 93, MSI, Code 128, UCC/EAN-128, Code 39, EAN-8,

EAN-13, UPC-A, ISBN, Industrial 25, Interleaved 25,

Standard 25, 2/5 Matrix,

2D: QR, Data Matrix, PDF417, Aztec, Hanxin ,

Micro PDF417(option)

Indicator: Led, Buzzer, Vibrator(option)

Battery capacity: 380mA

Charging voltage/current: 5V/1A

Endurance: 1D ≤ 12H 2D ≤ 8H (5seconds/scan)

Charge time: ≤ 2hours

Standby: > 30days

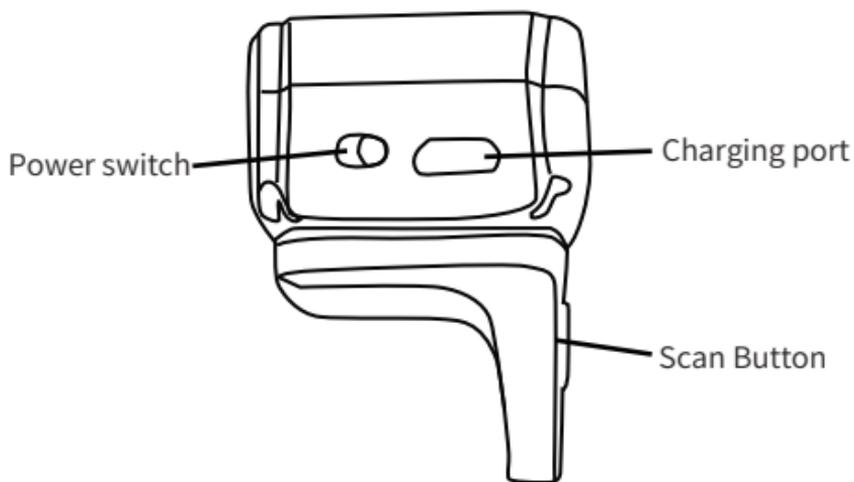
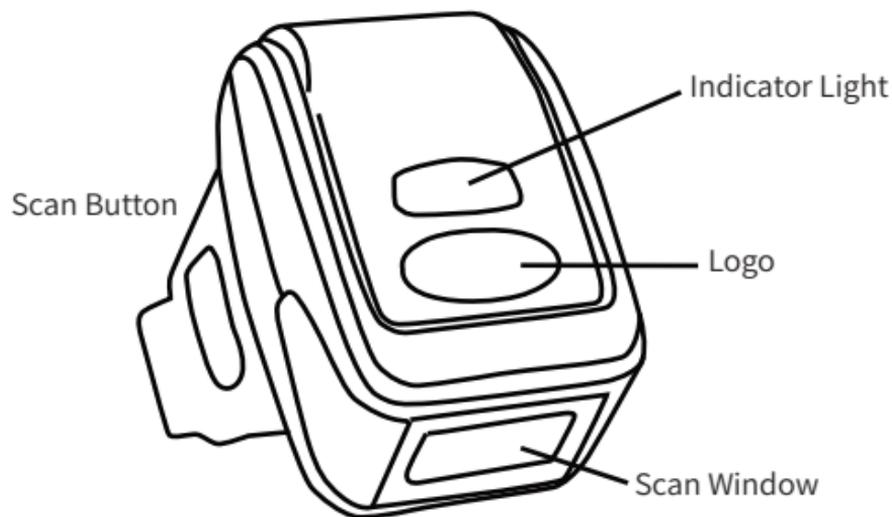
Working Conditions

- Working Temperature: 32°F to 104°F/0°C to 40°C
- Storage Temperature: -40°F to 140°F/-40°C to 60°C
- Humidity: 5% to 95% relative humidity (no condensation)
- Ruggedness: Resist about 6 times drops from 1.5m to concrete ground
- Ambient Light Immunity: Under normal office and factory ambient lighting conditions, or exposed to the sun won't take any effect to it.
- Electrostatic discharge: In line with 15KV air discharge and 8KV contact discharge requirements

Related Regulations

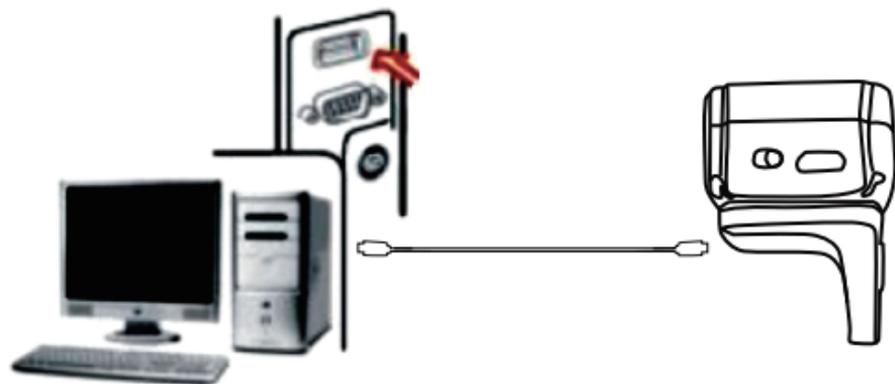
- Electrical safety: In accordance with UL1950、CSA C22.2 No.950、EN60950/IEC950 EMI/RFI:FCC Part 15 Class B、European Union EMC Directive、Taiwan EMC、
- Environment Terms: In accordance with RoHS directive 2002/95/EEC

Appearance



Installation of Cable USB Cable Installation

sample graph



Each barcode scanner is with one USB cable., For connection, please refer to above sample diagram.

Noted: Computer host can charge scanner via USB cable and USB cable can also be used as a wire to transmit barcodes.

The installation method is as follows:

1. Connect USB cable's Square Side interface to the bottom of the scanner;
2. Connect the other side of USB to the computer host.
3. Our barcode scanner features with wireless transmission mode and USB cable transmission mode. When triggered to wake up, the scanner will automatically identify whether the USB cable is connected. If identify, it will work in USB cable transmission mode, data transmitted via USB cable; If not, will work in wireless transmission mode, data transmitted via Bluetooth wireless .

Initialization Setting&Version Information

During usage,if you scan other set-up barcode by mistake and the scanning cannot perform as normal way, you can scan the initialization set-up barcode to revert.



Initialization Setting



Display Version Information

Bluetooth Pairing Steps :

Pair with operating system (Including Android, ios, win system) that with Bluetooth function :

A: Start the scanner and long press for 8 seconds or scan the bluetooth pairing setup barcode to enter the bluetooth search mode.



HID Pair Set-up Barcode

B: Turn on Bluetooth in the device to detect bluetooth device named with "Barcode Scanner HID".Click "Barcode Scanner HID" to enter pairing status.: If pair successfully, you will hear a beep.

Note: When the scanner enters the state of matching and it does not pair withbluetooth successfully within 1 minute, there is 2 times long low sound indicated failing match and return to scanning mode.

Pull up and Hide Keyboard of IOS System



Pull up and Hide Keyboard of IOS System



Trigger twice to pull up iOS keyboard



Trigger twice to disable iOS keyboard

Sound and Vibration Setting.

Select the desired to turn on/off the sound or vibration set-up barcode



Turn off the Sound



Turn on the Sound



Vibration off (optional)



Vibration on(optional)

Pairing with 2.4G Dongle :

PC terminals ,like desktop computer, which is not equipped with bluetooth,need to pair with Dongle,Dongle Pairing Steps as follow:

A:Scan Dongle setup barcode



B:Scan “Compulsory Pair with Dongle Setup Barcode” so that enter into pairing state.The blue light on the left flickers quickly.



Compulsory Pair with Dongle Setup Barcode

C:Plug the receiver, If pair successfully, you will hear a beep.The blue light on the right is always on.

Note: When the scanner enters the state of matching and it does not detect the receiver successfully within 1 minute, there is 2 times long low sound indicated failing match and return to scanning mode.

Dormancy time Setting



dormancy after 1 min



dormancy after 5 mins



dormancy after 10 mins



dormancy after 30 mins



Never enters dormancy



dormancy fastly

Keyboard Language Settings.



English



German



French



Spanish



Italian



Japanese



Only apply for PC and output by American Keyboard

End Character Setting

Select the end barcode you want to add



Add CR



Add LF



Add CR+LF



Cancel CR+LF



Add TAB

Transmission Speed Setting

Select the corresponding transmission speed according to PC receiving speed.



Fast



Medium



slow



Very Low

Bluetooth protocol

Select the desired communication bluetooth protocol barcode



Bluetooth HID Mode



Bluetooth SPP Mode



Bluetooth BLE Mode

Note: Scan above barcode to enter the bluetooth searching state

Operating Mode

In normal mode, the scans are uploaded directly to computer via USB cable . If succeeds, barcode scanner will make a low-frequency short tone. If it fails, there will be three low frequency short tones to alarm. In normal mode, if fails, the data will be lost.You can scan below:



Normal Mode

If the transfer range is beyond Bluetooth wireless transfer range . storage mode is suggested, in which scans are stored in internal storage after being scanned.

In storage mode, if a barcode is scanned and the scanner will make a short tone and scans are automatically stored in scanner's internal storage.

If the internal storage is full, the scanner will emit three low-frequency short tones to alarm.



Storage Mode

By scan “Total amount of stored barcode” barcode, to check the total amount of scanned barcodes in storage:



Total amount of stored barcode

Upload the stored data by scanning the "Data Upload" barcode.



Data Upload

Note: When uploading data, please ensure the wireless signal is perfect, or upload after connecting with USB cable

By scanning "Clear Data" to clear the scans in storage, the cleared scans won't be uploaded once cleared.

Please confirm whether the scans have been uploaded before clear them.



Clear Data

Bluetooth Name Change Setting

A. Scan Bluetooth Name Change Set-up Barcode:



Bluetooth Name Change Set-up Barcode

B. Scan the user-defined barcode of bluetooth name within 16 characters (Symbology unlimited, letter, number or symbol works). If customer wants to change the bluetooth name as you like it, you should equipped with bar code generator yourself. For example, Once you make a bar code of Scanner123, the bluetooth name of scanner would be changed as Scanner123 after scanning the bar code you made.



Scanner123

Note: Once initialized, the bluetooth name would revert to the default.



Initialization Set-up

Hide front and back characters

A: Scan "Hide front character" or "Hide back character" Setting Barcode



Hide front character



Hide back character

B: Scan hide quantity of characters



Hide 1 Character



Hide 2 Characters



Hide 3 Characters



Hide 4 Characters



Hide 5 Characters



Hide 6 Characters



Hide 7 Characters



Hide 8 Characters

Note: If you want to cancel “Hide front and back characters” operation, please scan barcodes of “Hide front character” or “Hide back character” Setting Barcode

Caps Lock Switch



Compulsory to Lower Case



Compulsory to Capital



No Caps Lock Switch



Caps Lock Switch

Set Prefix and Suffix Setting

A : Scan the "Allow for Prefix Adding" or "Allow for Suffix Adding" setting barcode



Allow for Prefix Adding



Allow for Suffix Adding

B : Select the desired contents of prefix or suffix (Appendix A)

Note: If you want to cancel Prefix or Suffix Adding operation, please scan barcodes of "Allow for Prefix Adding" or "Allow for Suffix Adding" "Setting Barcode once more

Appendix A:



SOH



STX



ERX



EOT



ENQ



ACK



BEL



Back Space



LF



VT



FF



CR



Tab



F1



F2



F3



F4



F5



F6



F7



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F9



F10



F11



F12



FS



GS



RS



SUB



Esc



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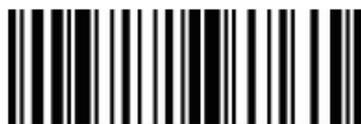
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DEL

FAQ

▶ **What should I do if I can not pair scanner with Bluetooth devices?**

A.Please make sure that scanner is in the matching state under corresponding bluetooth protocol

B.If the devices has connected successfully with other barcode scanner via bluetooth,or other devices.Please delete the bluetooth connection record before connecting.

C.The wireless module has been damaged

▶ **Why some symbologies fail to be read?**

The scanning module does not support the symbology or the symbology has been turned off , please contact with the vendor to turn on the code system.

▶ **Why scans fails to be uploaded to computer or smartphone ?**

A. Please make sure if they have been sucessfully paired, if yes, the LED indicator of the bluetooth barcode scanner is blue.

B. Please check if it is in "Storage Mode". (In "Storage Mode" scans won't be uploaded automatically, please scan "Data Upload" setting code manually to upload the scan is required)

C. Please switch to "Normal Mode" to scan and upload simultaneously.

D.The wireless module has been damaged

▶ **Why the barcode content is not correct?**

Please make sure that the PC or smartphone keyboard language is the same as Barcode Scanner language.

▶ **Why does the scanner cannot charge?**

A.Please select correct charger.

B.The charging circuit or battery has been damaged.

▶ **How to change more scanning settings?**

Please contact your barcode scanner vendor.

Buzzer

Sound Type	description
a long sound (First low then high frequency)	Means power on
a long sound (First high then low frequency)	Means power off
a short sound (low frequency)	Means read barcode
a short sound (First low then high frequency)	Means data has been stored
a short sound (First high then low frequency)	Means scan the set-up barcode
a short sound (low frequency)	Means wireless transmission failed or cache is full

During normal usage or start-up process,if the buzzer continuously makes five times long sound(low frequency) ,then automatically power off. It means the power capacity is too low and need to be charged before use.

LED Indicator light

light color	description
two blue lights flicker alternately	Enter into HID pairing state
two blue lights flicker at the same time	Enter into BLE pairing state
blue light on the right flicker	Enter into SPP pairing state
red light always on	Charging state,after full,it will be off
red light flickers	Poor battery contact
green light on and off immediately	Read barcode successfully and make a short sound



Electric Quantity Display