2D Barcode Scanner

User Guide

Version：1.0

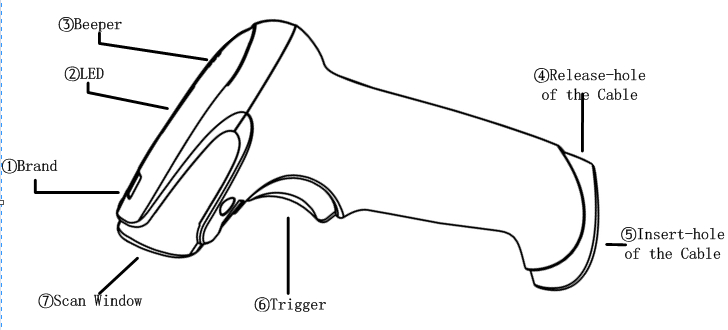
NOTE：

* For stability enhancement of scanner or other properties, Manufacturer may modify the software (including firmware) .
* A standard packing includes a user guide, a cable and a Scanner .

# Profile

# It is developed to meet the increasing needs of 2D barcode identification. It does not only accurately and quickly read both 1D and 2D barcodes, but also seamlessly captures barcodes on electronic screens (such as mobile phone) and provides an effective data acquisition tool for e-coupons and e-tickets. It’s suitable for a wide variety of applications. Compared to the expensive imported scanners, It is definitely a cost effective and high performance product for you!

# Parts of the Scanner



# Performance index

|  |  |
| --- | --- |
| Input voltage | DC 5V± 0.25V |
| Power | 1.40W（working） ；0.40W（standby） |
| Current | 400mA（Max）; 300mA（working） ；70mA（standby） |
| Image Sensor | 752 × 480 cmos sensor |
| Rotational Sensitivity | ±360° |
| Viewing Angle | ±40° |
| Symbologies | PDF417，QR Code，Data Matrix，HanXin code,Aztec,etc |
| Code 39, Code 128, Codebar, UPC, EAN, Interleaved 2 of 5, etc |
| Prompt | beeper，LED |
| Interface | USB VCP/USB HID |
| Trig mode | Hand-held/hand-free |
| dimension | L×W×H：190mm× 65mm× 85mm |
| Weight | 156g（without cable） |
| Cable | 2m |
| Connector | RJ-45 |
| Material | PC |
| Temperature | -5°C~ 45°C（working） ；-40°C~60°C（Storage） |
| Humidity | 5%~95%（non-condensing） |
| Set mode | online/scanning |
| firmware update | online |
| Accuracy | ≥ 5mil |
| depth of focus | 40mm~300mm |
| security classification | EMC：EN 55022，EN55024  Electrical safety：EN 60950-1  Waterproof and dustproof：IP52 |

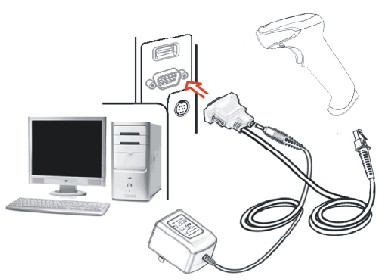
# Installing the Cable

**USB Cable**

****

1. Refer to the picture, connect the host with the scanner;
2. Switch on the host. If the installation is successful, the beeper and LED will work.
3. Scanner can work without External power supply.
4. Host will automatically detect the scanner.

**RS232 cable**



1、Make sure the power off。

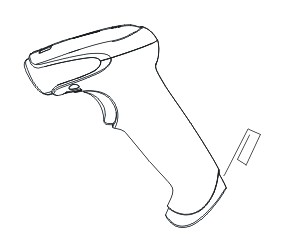
2、Insert the RJ45 into the scanner。

3、Connect the RS232 to the host。

4、Plug the power adapter。

5、Power on the host. If connect right, it will prompt from beeper and LED.

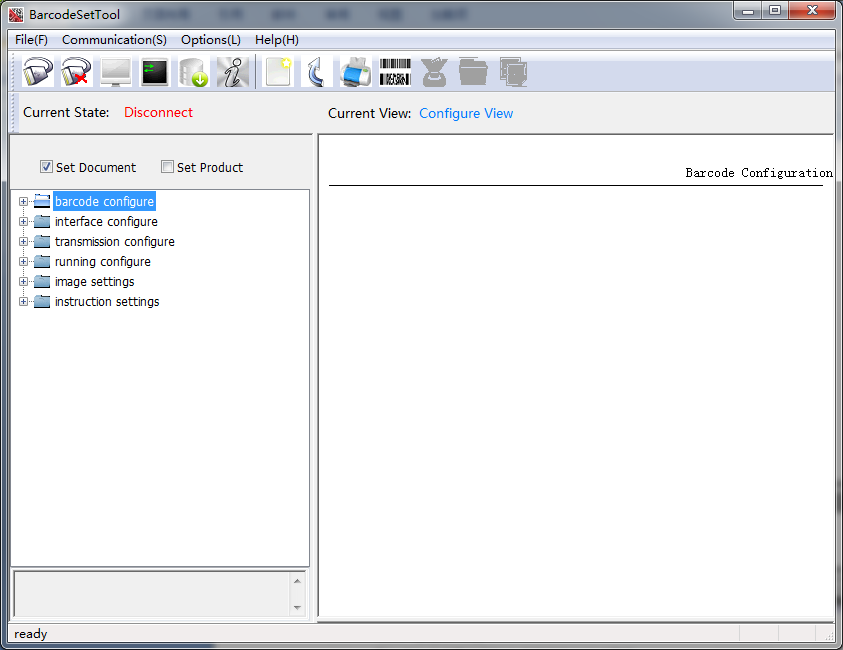
# Removing the Cable



1. Find the release-hole.
2. Insert a thin wire into the hole and pull out the cable gently.

# Parameter settings

## Set from BarcodeSetTool

If the scanner  is connected correctly, you can use the software of configuration management for the corresponding parameter settings 

Please contact the local agency for the software.

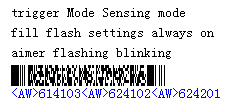
## Scan the barcode

**1.Single Setting**

Scanning the corresponding 'set barcode'。

Example： Scan the right barcode，set ’sensing mode’。

**2.Multiple Setting**

Reading ‘Multiple setting code’, You can perform a

variety of functions set.。

Example：Scan the right barcode，Set ‘Sensing mode’

‘Flash always on’ ’aimer flash blinking’

**More ‘ Multiple setting code’, Please Contact local agents 。**

## Set up from the host

Note:

1 This section is suitable for the scanner with the RS232 cable or USB cable。

2 The scanner must be setup VCP mode for the USB type.

UART Parameters

（1） Baud rate:115200 bps;

（2） Data bits transmitted:8 data bits;

（3） stop bits:1 bit;

（4） parity check: NO;

3 protocols

Protocols command

|  |  |  |  |
| --- | --- | --- | --- |
| Type | PID | FID | Parameter |
| 1Byte | 1Byte | 1Byte | -- |

Instruction

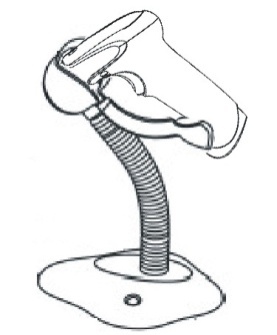
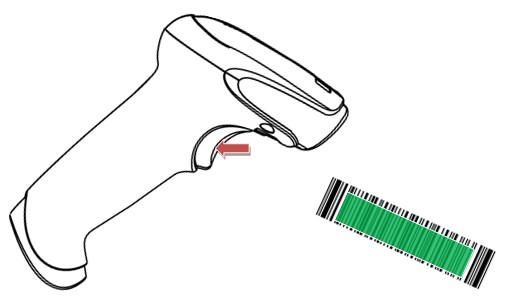
|  |  |  |
| --- | --- | --- |
| Type | Length | Describe |
| TYPE | 1byte | Command type |
| PID | 1byte | Property ID |
| FID | 1byte | Function ID, FID as a parameter bytes instructions:：  7bit 6bit parameter length  0 0 No  0 1 1byte  1 0 2byte  1 1 >2byte |
| PARAM | -- | Parameter length according to FID。If the length is longer than two bytes, The first two bytes of parameters indicate the length of parameters. |

Please contact the local agency for more information.

# Scan

**Hand-held Mode**

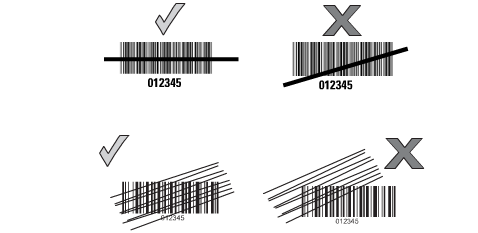
1. Ensure Scanner, Cables, and the Host are connected, then turn the unit Power ON；
2. Press & hold Trigger. Illumination LED and Aiming LED cast an Illumination Pattern(red light)and an Aiming Pattern(green light)。
3. On a successful reading, there will be a beep sound, illumination & aiming patterns die out. The scanner the transmits barcode message to the Host.



**Hand-held Mode** **Hands-Free Mode**

**Hands-Free Mode**

1. Select reading mode ‘sensing mode’or’continuous mode’,when working in hands-free mode。
2. Adjust the stand height for the optimum reading stance。



# Beeper

Scanner through different buzzer to indicate status.  It defines the different status in the following table.

|  |  |
| --- | --- |
| **Beeper** | **Instructions** |
| 2 short | Start |
| 1 short | Success read |

# LED

Scanner also through different LED to indicate working status. It defines the different status in the following table.

|  |  |
| --- | --- |
| **LED** | **Instructions** |
| OFF | Power off or standby. |
| Light for 1s | Success read |

# Setting Barcode

## Instruction Settings

Restore factory settings



Start decoding Stop decoding

Disable all decoding Enable 1D decoding

Enable 2D decoding Enable all decoding

## Barcode Configure

### 2D barcode settings

QR code enable QR code disable

PDF417 code enable PDF417 code disable

Chinese-sensible code enable Chinese-sensible code disable

DataMatrix code enable DataMatrix code disable

Aztec code enable Aztec code disable

### Code11 Configure

Code11 code enable Code11 code disable

Check digit verification disable Check digit verification one digit

Check digit verification two digits Check digit verification auto

### Code39 Configure

Code39 code enable Code39 code disable

Code39 verification disable Code32 verification

### Code93 Configure

Code93 code enable Code93 code disable

### Code128 Configure

Code128 code enable Code128 code disable

### UPC Configure

UPC-A code enable UPC-A code disable

UPC-E code enable UPC-E code disable

### EAN Code Configure

EAN-13 code enable EAN-13 code disable

EAN-8 code enable EAN-8 code disable

### Codebar Code Configure

Codebar code enable Codebar code disable

Codebar verification Enable Codebar verification Disable

### Standard 2 of 5 Code Configure

Standard 2 of 5 Code Enable Standard 2 of 5 Code Disable

Verification Disable Verification Enable

### Matrix 2 of 5 Code Configure

Matrix 2 of 5 Code Enable Matrix 2 of 5 Code Disable

Verification Enable Verification Disable

### Interleaved 2 of 5 Code Configure

Interleaved 2 of 5 Code Enable Interleaved 2 of 5 Code Disable



Verification Enable Verification Disable



### MSI Code Configure

MSI Code Enable MSI Code Disable

Verification Disable Verification Enable

### GS1 Databar Code Configure

GS1 Databar Omni-Directional Enable GS1 Databar Omni-Directional Disable

GS1 Databar Limited Enable GS1 Databar Limited Disable

GS1 Databar Expanded Enable GS1 Databar Expanded Disable

### Plessey Code Configure

Plessey code enable Plessey code disable

### China Post Code Configure

China Post code enable China Post code disable

## Interface Configure

Uart USB HID

Uart baud rate 9600 Uart baud rate 19200

Uart baud rate 38400 Uart baud rate 57600

Uart baud rate 115200 Uart baud rate 12800

Uart baud rate 230400 Uart baud rate 25600

Uart baud rate 460800



Note：Baud rate settings is set only for RS232 scanner. In VCP mode, baud rate is in Adaptive mode. You must set baud rate in 115200.

## Transmission Configure

Prefix settings insert ‘tab’ Prefix settings insert ‘\r\n’

Suffix settings insert ‘tab’ Suffix settings insert ‘\r\n’

Symbology identifier enable Symbology identifier disable

## Keyboard Layout

USA Spanish

German French

Italian Sweden

UK Brazil

Latin America India

Korea Russia

## Running Configure

### Trigger mode

Trigger mode Continuous mode

Automatic mode Sensing mode

Pulse mode



### Auto sleep Settings

Auto sleep enable Auto sleep disable

### Fill Flash Settings

Always off Blinking

Always on



### Aimer flashing

Always off Blinking

Always on



### Buzzer Settings

Low Volume Medial Volume

High Volume Buzz Num 0

Buzz Num 1 Buzz Num 2

# Troubleshooting

|  |  |  |
| --- | --- | --- |
| **Problem** | **Possible Cause** | **Possible Solution** |
| Scanner does not turn on | Power off | Insert the adapter. |
| Interface fails | Check the cable. |
| Scanner power on, but it cannot read the barcode. | Did not enable the barcode | Please enable it. |
| Scanner cannot read the barcode type. | Please contact the dealer or us |
| Wrong distance. | Move the scanner. |
| Scanner does not send data to host computer | Scanner is not connected to the host. | Check all cable to host computer. |
| Receive garbled with RS232 | Scanner and the host baud rate settings are inconsistent | Check scanner an PC communication port baud rate settings are the same. |