# **2D Image Barcode Scanner User Manual**



V: 1703

#### **Technical Parameters**

Light Source	White LED
Sighting Device	Red LED, 617nm
Interface	USB
Scanning Type	Image
Scanning Angle	Angle of pitch ±70°, Angle of inclination ±60°, Rotation ±180°
Discernible Printing Contrast	Minimum 30% contrast
Decoding Capability	All standard 1D and 2D bar codes
Input Voltage	4 ~ 5.5 V DC
Operating Power	2W; 400mA @ 5V-typical value
Standby Power	0.45W; 90mA @ 5V-typical value
EMC	EN55022, EN55024 Class B
LED Safety Certificate	IEC62471
СВ	IEC60950
Other Certificate	GOST-R, CE
Operating Temperature	0°C - 40°C
Storage Temperature	-40°C - 60°C
Humidity	5%~95% relative humidity (non-condensing)
Light Level	0 - 100,000LUX
Shock Resistance	Designed to withstand1.5 meters drop on concrete surface
Dust Proof	Seal to prevent air dust
IP Level	lp54
Bar Code Density	Depth of field
5 mil Code39	33 - 95 mm (1.3 - 3.7 in.)
13 mil UPC-A	32 - 255 mm (1.3 - 10.0 in.)
20 mil Code 39	35 - 355 mm (1.4 - 14.0 in.)
6.7 mil PDF417	30 - 95 mm (1.2 - 3.7 in.)
10mil Data Matrix	30 - 100 mm (1.2 - 3.9 in.)
15mil Data Matrix	21 -162 mm (0.8 -6.4 in.)
20mil QR	23 -200 mm (0.9 -7.9 in.)
Resolution	4 mil
Tolerance	100mm/sec 13 mil UPC

#### Connecting the Scanner

- Connect the barcode scanner (desktop barcode scanner) to the special accessory cable joint.
  - 2. Plug the other special accessory cable joint to the PC.

If the bar code configuration switch is off, please refer to the first page to turn on the bar code configuration switch.

#### Interface Mode

This barcode scanner (desktop barcode scanner) supports the following three interface modes: USB keyboard, USB convert to RS232, Rs232.

Scanning the below bar code sets the barcode scanner (desktop barcode scanner) into USB keyboard mode. This mode is the default.



USB keyboard (default)

Scanning the below bar code sets the barcode scanner (desktop barcode scanner) into RS232 mode.



Rs232

Scanning the below bar code sets the barcode scanner (desktop barcode scanner) into USB Convert to RS232 mode. (Please contact the retailer to install a driver.)



USB Convert to RS23

#### Configuration Code On/Off

When this function is on, all setup bar codes can be scanned to configure the scanner (desktop barcode scanner).

When this function is off, all setup bar codes cannot be scanned to configure the scanner (desktop barcode scanner). Please scan the below "ON" then the scanner (desktop barcode scanner) can read all setup bar codes and start configuration.



Configuration Code ON (default)



Configuration Code OFF

1

#### **Default Configuration**

Scanning the below bar code makes the product restore the factory default settings.



Restore the Factory Default Settings

#### **User Configuration**

Scanning the below bar code can save the current parameters as user configuration.



Save User Configuration

Scanning the below bar code can restore the product to the saved user configuration.



Restore User Configuration

#### **Rs232 Baud Rate Configuration**









#### Auto-scanning mode

This product installs an auto scanning mode. Scanning the following bar codes to turn on or turn off the mode.

#### Auto-scanning mode OFF

Please decode by pressing the manual trigger when the auto-scanning mode is OFF. Auto-scanning OFF mode is the default.



#### Auto-scanning mode ON

When the auto-scanning mode is ON, the scanner can decode by sensing the bar codes in front of the lens automatically.



Prefix





Suffix





#### User-defined Prefixes and Suffixes



User-defined Prefixes and Suffixes Configuration ON



User-defined Prefixes and Suffixes Configuration OFF

#### Bar codes with CR and LF Configuration (USB keyboard)



Only LF for Line Feed



**Buzzer Setting** 

Volume Control



Low



#### Start Sound of the barcode scanner ON/OFF



OFF



ON (default)

#### **Decoding Prompt Sound ON/OFF**



OFF



ON (defaul

#### **Decoding Prompt Sound Volume**



Low



Medium (default



**Decoding Prompt Sound Duration** 



Long (default)



Short

#### **Error Warning Sound Volume**

When the scanner fails to upload the data, it will beep four times continually. When the scanner fails to read the configuration code, it will beep one time.



Low (default)



Madium



Hial

#### **LED Indicator Light**



Right Decoding LED Indicator Light OFF



Indicator Light ON (default)

#### Repetitive Bar Codes Interval Configuration

When you scan the same bar code, this scanner will decode only one time during the set interval. You can set the interval time by scanning the following bar codes.



Interval Time 500ms



Interval Time 750ms(default)



Interval Time 1s



Interval Time 2s

#### Upload Speed in USB Keyboard Mode

The following bar codes are used to configure the speed of uploading in the USB Keyboard Mode. If you use a PC with low capacity, we suggest you choose the low speed for the precision of the uploading data.

6







#### **Keyboard Layouts**



English (United States)





Italian (Italy)





German (Germany)



Russian (MS)



Arabic (101)



Portuguese (Portugal)



Portuguese (Brazil)

#### **Choose Bar Code Type**

#### All Bar Code Types ON/OFF

The default setting is that the scanner can read all installed bar code types. But in this situation (All Bar Code Types ON), the speed of decoding may slow down. Please choose the code types you need to improve the decoding speed.



All Bar Code Types ON (default)



Codabar



Codabar ON



Codabar Start/Stop CHARS



Not Transmit Codabar Start/Stop CHARS (default)



Transmit Codabar Start/Stop CHARS

Code 39



Code 39 ON (default)



Code 39 OFF

#### Code 39 Check BIT



Code 39 Check OFF (default)



Code 39 Check ON Without Check BIT



Code 39 Check ON With Check BIT

#### Code 32 (Need Code 39 ON)



Code 32 ON



Code 32 OFF

#### Interleaved 2 of 5(ITF25)



ITF25 ON



ITESE OFF

#### Interleaved 2 of 5(ITF25)Check Bit



ITF25 Check OFF (default)



ITF25 Check ON Without Check Bit



ITF25 Check ON With Check Bit

#### Choose the Length of Interleaved 2 of 5(ITF25)



ITF25 Any Length (From 4 Bits To 24 Bits) (default)



ITF25 6 Bits



ITF25 8 Bits



ITF25 10 Bits



ITF25 12 Bits



ITF25 14 Bits



ITF25 16 Bits



ITF25 18 Bits



ITF25 20 Bits



ITF25 22 Bits



ITF25 24 Bits

#### Industrial 2 of 5 (4-24 Bits)



Industrial 2 of 5 ON



Industrial 2 of 5 OFF

#### Matrix 2 of 5 (4-24 Bits)



Matrix 2 of 5 ON



Matrix 2 of 5 OFF

#### Code 93



Code 93 ON



Code 93 OFF

#### **Code 128**



Code 128 ON



Code 128 OFF



GS1-128 ON



GS1-128 OFF





UPC-A ON



UPC-A OFF

**UPC-A Check Bit** 



UPC-A With Check Bit (default)



UPC-A Without Check Bit

UPC-E



UPC-E ON



UPC-E OFF

#### HPC-E Check Bit



UPC-E With Check Bit (default)



UPC-E Without Check Bit

EAN/JAN-8



FAN/JAN-8 ON



EAN/JAN-8 OFF

#### EAN/JAN-13



EAN/JAN-13 ON



EAN/JAN-13 OFF

### **UPC/EAN/JAN Supplement**



NO UPC/EAN/JAN Supplement (default)



Decode UPC/EAN/JAN Supplement



UPC/EAN/JAN Supplement Self-adaption



EAN13 Convert into ISBN Accessible



EAN13 Convert into ISBN Inaccessible (default)



EAN13 Convert into ISSN Accessible



EAN13 Convert into ISSN Inaccessible (default)



Gs1 DataBar ON



Gs1 DataBar OFF

Gs1 DataBar Limited

Gs1 DataBar Limited ON



Gs1 DataBar Limited OFF

## Gs1 DataBar Expanded

Gs1 DataBar Expanded ON



Gs1 DataBar Expanded OFF

**PDF417** 



PDF417 ON



PDF417 OFF

**QR** Code



QR ON



QR OFF

Micro OR



Micro OR ON



Micro QR OFF

14





Data Matrix ON



Data Matrix OFF

Aztec Code



Aztec ON



Aztec OFF

#### Warning Sound

When the scanner fails to upload the data, it will beep four times continually. In this situation, please check whether the cable joints are correctly connected or not.

#### Scanning Skills

To guarantee a precise read, please keep the beam of the scanner on the center of the bar code at any direction.

Hold the scanner before the bar code, press the manual trigger and make sure the beam aim at the center of the code.

As the scanner gets closer to the bar code, the beam become narrower and as the scanner gets father to the bar code, the beam become wider. Therefore, to make quick precise read, please keep the scanner close to the bar code if it is small and keep the scanner far to the bar code if it is big.

The barcode scanner with a high reflectance needs to lean to a certain angle to make quick precise read.

#### Safety

Please do not stare at the screen of the scanner when it is at work, in case the strong beam makes your eyes uncomfortable or injured.