# 2D FIXED BARCODE SCANNER Quick Guide



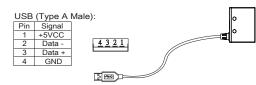
2D Fixed Barcode Scanner Quick Guide (Rev2) P/N: 8013-0055001

# STEP1 - CONNECT TO HOST

#### **USB Connection**

1. Connect the scanner to the host.

2. The scanner will be powered by the USB connection.



#### **RS232** Connection

- 1. Connect the scanner to the host.
- 2. Supply power directly to Pin 9 or plug power adapter to the DC Jack. The scanner will be powered up.

Pin	Signal				
2	TXD(Out)	P5	P1		Г
3	RXD(In)				
5	GND	(r	••••]		II.
7	CTS(In)	Ų	••••		
8	RTS(Out)	<b>P9</b> ∕	<b>P6</b>		- <b>al</b>
9	+5VCC				

#### **SPECIFICATIONS**

Light source	625nm visible red LED
Aimer	650nm visible red Laser
Scan rate	60 frames/sec
Resolution	5mil/ 0.127mm
PCS	30%
Width of Field	131mm (13Mil Code39)
Depth of Field	5 Mil Code39: 55 - 160mm
	10 Mil Code39: 65 - 270mm
	13 Mil UPC/EAN: 65 - 285mm
	10 Mil DataMatrix: 50 - 125mm
	10 Mil QR Code: 65 - 130mm
Dimension	W56 x L41 x H20 mm
Housing	ABS (Housing), PC (Back Cover)
Weight	120g ± 10g
Cable Length	90cm/35.4in (Fixed Cable)
Interface	RS232, USB HID, USB VCP
Voltage	5VDC±5%
Working Current	< 320mA
Standby Current	< 100mA
Operating Temp.	-10 to 55°C (14°F to 131°F)
Storage Temp.	-20 to 65°C (-4°F to 149°F)
Ambient Light	30,000 lux
Drop Durability	1.5M
Sealing	IP55
Symbologies	QR Code, DataMatrix, PDF417 and all major 1D barcodes

## **STEP2 - CONFIGURE INTERFACE**

#### **USB Connection**

USB HID

USB VCP

- By default, barcode data will be sent as HID keyboard input (USB HID).
- 2. Below configuration barcodes allow you to switch between two USB modes (USB HID & USB VCP)
- For USB VCP driver, please download it from our website or contact your local distributor.
- 4. Only USB VCP interface allows you to enable software trigger (see back page for details)

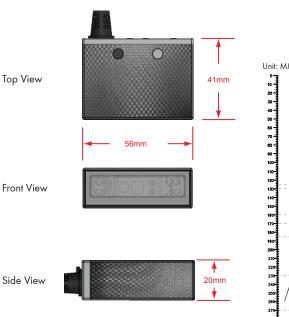




#### **RS232** Connection

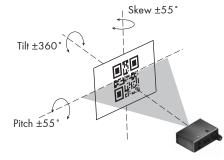
- 1. By default, barcode data will be transmitted by the communication protocols of 9600-8-N-1
- 2. RS232 interface allows you to enable software trigger (see back page for details)

## DIMENSION

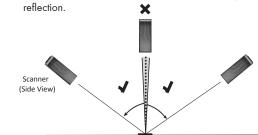


## **STEP3 - POSITION SCANNER**

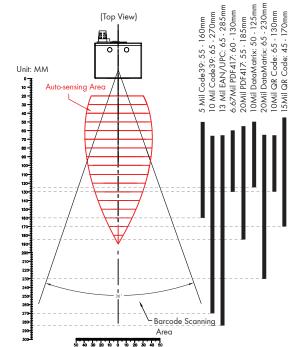
1. Maximum Scan Angle: Skew  $\pm 55^{\circ}$ , Pitch  $\pm 55^{\circ}$ , Tilt  $\pm 360^{\circ}$ 



2. Pitch the scanner at a minimum of  $\pm 5\,^\circ$  to avoid specular



## **SCANNING RANGE**



## **STEP4 - INSTALL SOFTWARE UTILITY**

Based on different hardware & configuration method, there are 2 types of software utility:

1. EZU Software - works with USB HID interface

2. **BEO** Software - works with RS232 & USB VCP and supports command operation

Both are available for download from below link:



#### **STEP5 - CONNECT**

- Right-click on the *totality* icon on the desktop and tick "Run this program as an administrator" in the pop-up menu.
- 2. Double-click right icon on the desktop to launch the program.
- In Communication Setting window, select "2D-Fixed" as genre and "USB" as interface. Click [Save Home(H)] to continue.

Communication Setting				
Save Home (H) Fixed	*			
USB	Time out 3			

#### **STEP6 - CONFIGURE THE SCANNER**

- Click on icon on the toolbar to retrieve scanner's parameters.
- 2. Double-click on the items you want to edit and then press [Enter] to save changes.

🐝 Utility (New)			
© System (S) 00	peration ( <u>0</u> ) 🖾 View	(V) X Tools (T) Fixed	
😈 📓 😍 📖 🔤 🖿	"  🖨 😩 🛊 📰 👘 👘		
General Settings	Property	Parameter	
S Reading Opteration	Interface	USB (HID)	
Symbologies	Computer Type	Notebook PC	
⊕-¶ Data Editing	Keyboard Layout English (USA)		
	Capital Lock Mode	Off	
	Numeric Keypad Output	Off	
When Capital Lock Mode  is set to Auto, whether	Function Code	On	
the keyboard CapsLock	HT/CR/ESC -> TAB/Enter/	Off	
LED indicator is ON or OFF, output will be	Terminator	CR	
always the same as the original data of a	Interblock Delay	0 ms	
barcode.	Intercharacter Delay	140 us	

- 3. Click on 🚺 icon on the toolbar to update scanner's parameters.
- 4. Click on eigen icon on the toolbar if you want to save current configurations for later use.

## **ADVANCED - READING MODE**

#### **Infrared Auto-Sensing Mode**

- By default, the scanner is in Infrared Auto-Sensing Mode, which enables it to start scanning when an object comes within Auto-Sensing Range. The scanner will scan again only after the object/barcode that has been successfully scanned previously is removed from Auto-Sensing Range. This mode is best suited for access control, kiosk, parking , e-locker and so on.
- Auto-Sensing Range is configurable. To configure Auto-Sensing Range, go to Ez Utility > General Settings > Reading Operation > Auto-Sensing Range; there are three options avaliable:

(1) Near- Max. 13cm Auto-sensing Range(2) Middle (Default)- Max. 20cm Auto-sensing Range(3) Far- Max. 27cm Auto-sensing Range

#### **Continuous Mode**

- Continuous Mode enables the scanner to scan continuously To configure Continuous Mode, please go to Ez Utility > General Settings > Reading Operation > Reading Mode
- 2. Continuous Mode can deal with more scan-intensive applications, such as factory automation (production line)

## **BEO SOFTWARE CONFIGURATION (RS232 & USB VCP)**

#### **STEP5 - CONNECT**

1. Right-click on the  $\sum_{\text{BEO}}^{m}$  icon on the desktop and tick "Run this program as an administrator" in the pop-up

2. Double-click to launch the program.

 Click on a icon on the toolbar, set 9600-8-N-1 and set COM# as appropriate. Click [Save Home(H)] to continue.

Communication setting	×
📚 Save-Home ( <u>H</u> )	
RS-232 💌	COM1
9600 💌	None
8 Bits	1 Bit(One)
🔽 Auto Detection	Time out 35

#### **STEP6 - CONFIGURE THE SCANNER**

- Click on sicon on the toolbar to retrieve scanner's parameters.
- 2. Double-click on the items you want to edit and then press [Enter] to save changes.

DEC (New)	<u> </u>			
System ( <u>E</u> ) 🛸 File (	E) <b>Operation</b> (O)	<mark>∡ Tools (<u>T</u>)</mark>		
🔤 💐 🖾 🚔 🛃 🚿 🥔 🛃 🐨 📥				
Setting Window     Scan Application	Property	Parameter		
General Setting	Code ID type	Disable Code ID		
RS232 Protocol	Send Data Length	Off		
Advanced Item	Label Type	Positive		
🔨 Codabar	Interblock Delay	0 ms		
	Intercharacter Delay	140 us		
Status of negative label	Accuracy Adjustment	0		
decoding capability. only supported by certain	Preamble	Disable		
models.	Postamble	Disable		
For more information, please refer to Help file (F1).	Terminator	{CR}{LF}		

3. Click on 💽 icon on the toolbar to update scanner's parameters.

4. Click on icon on the toolbar if you want to save current configurations for later use.

## **ADVANCED - READING MODE & COMMAND**

#### Serial Trigger Mode

- The scanner with RS232 or USB VCP interface supports Serial Trigger Mode which allows user to start scanning by software trigger sent from the host.
- 2. To configure Serial Trigger Mode, please go to BEO > Setting Window > Scan Application > Reading Mode
- 3. In Serial Trigger Mode, the scanner will start scanning after receiving below command:

#### {G}

Ini

The scanner stops scanning after a successful barcode scan or receiving below command:

#### {S}

\*Note: Full functions of the scanner can be controlled by the host through software command via RS232 or USB VCP interface. For full list of commands, please refer to Serial Command Manual which is available from our website or your local distributor.