1D FIXED BARCODE SCANNER

Quick Guide

1D Fixed Barcode Scanner Quick Guide (Rev2)
P/N: 8013-0044001

SPECIFICATIONS

Light source	635nm visible red LED
Scan rate	510 scans/sec
Sensor	Linear Image Sensor
Resolution	3mil/ 0.075mm
PCS	30%
Width of Field	140mm (13Mil Code39)
Depth of Field	3 Mil Code39: 65 - 95mm
	4 Mil Code39: 55 - 110mm
	5 Mil Code39: 55 - 150mm
	10 Mil Code39: 35 - 330mm
	15 Mil Code39: 50 - 460mm
	13 Mil UPC/EAN: 45 - 370mm
Dimension	W56 x L41 x H20 mm
Housing	ABS (Housing), PC (Back Cover)
Weight	86g
Cable Length	90cm/35.4in (Fixed Cable)
Interface	RS232, USB HID, USB VCP
Voltage	5VDC±5%
Working Current	< 200mA
Standby Current	< 120mA
Operating Temp.	-10 to 50°C (14°F to 122°F)
Storage Temp.	-20 to 65°C (-4°F to 149°F)
Ambient Light	70,000 lux
Drop Durability	1.5M
Sealing	IP55
Symbologies	All major 1D barcodes incl. GS1 Databar

DIMENSION

Top View

41mm

56mm

Front View

Side View

20mm

SCANNING RANGE

Unit: MM

Auto-sensing Area

40°

Barcode Scanning Area

3 Mil Code39: 65 - 95mm
4 Mil Code39: 55 - 110mm
5 Mil Code39: 55 - 150mm
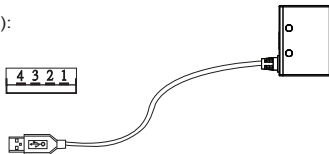10 Mil Code39: 35 - 330mm
15 Mil Code39: 50 - 460mm

STEP1 - CONNECT TO HOST

USB Connection

1. Connect the scanner to the host.
2. The scanner will be powered by the USB connection.

USB (Type A Male):

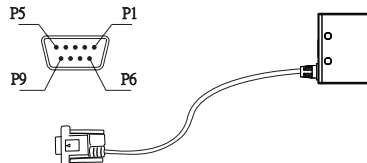| Pin	Signal
1	+5VCC
2	Data -
3	Data +
4	GND

4 3 2 1

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.

RS232 (D-Sub 9 Female):

Pin	Signal
2	TXD(Out)
3	RXD(In)
5	GND
7	CTS(In)
8	RTS(Out)
9	+5VCC

P5 P1
P9 P6

STEP2 - CONFIGURE INTERFACE

USB Connection

1. 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)
3. For USB VCP driver, please download it from our website or contact your local distributor.
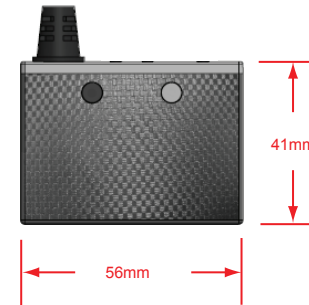
USB HID

. C008$

USB VCP

. C006$

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)

STEP3 - POSITION SCANNER

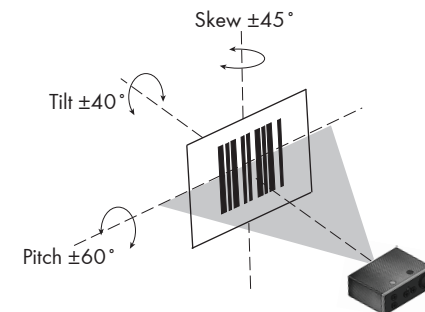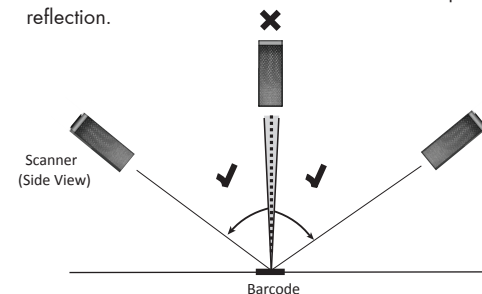1. Maximum Scan Angle: Skew ±45°, Pitch ±60°, Tilt ±40°

Skew ±45°

Tilt ±40°

Pitch ±60°

2. Pitch the scanner at a minimum of ±5° to avoid specular reflection.

Scanner (Side View)

Barcode
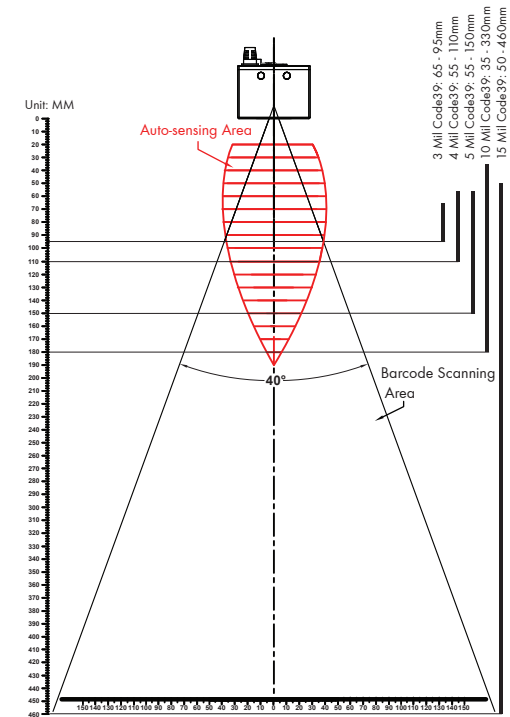
STEP4 - INSTALL SOFTWARE UTILITY

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

1. **EZU** Software - works with USB HID & USB VCP

2. **BEO** Software - works with RS232 interface and supports command operation

Both are available for download from below link:

Please visit **www.marson.com.tw**
and enter **MT6220 > Downloads**

Or simply scan below barcode by smartphone

# EZU SOFTWARE CONFIGURATION (USB HID & USB VCP)

STEP5 - CONNECT

1. Right-click on the [Ez Utility] icon on the desktop and tick "Run this program as an administrator" in the pop-up menu.
2. Double-click [Ez Utility] icon on the desktop to launch the program.
3. In Communication Setting window, select "1D-Fixed" as genre and "USB" as interface for USB HID, or select "RS232" with 9600-8-N-1and COM# as appropriate for USB VCP. Then Click [Save Home(H)] to continue.
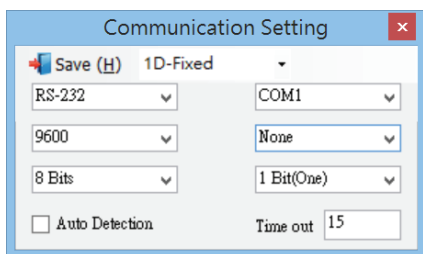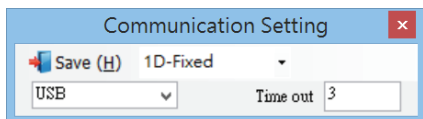
STEP6 - CONFIGURE THE SCANNER

1. Click on [icon] 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.
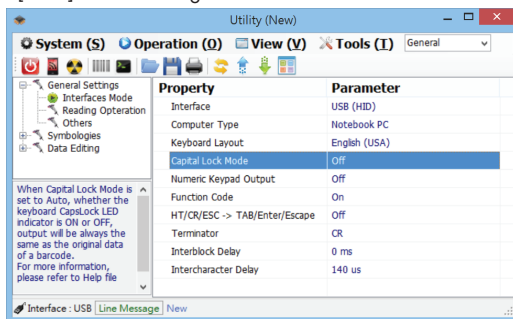
3. Click on [icon] icon on the toolbar to update scanner's parameters.
4. Click on [icon] icon on the toolbar if you want to save current configurations for later use.

ADVANCED - READING MODE

Infrared Auto-Sensing Mode

1. 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.

2. 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

1. 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)

STEP5 - CONNECT

1. Right-click on the [BEO] icon on the desktop and tick "Run this program as an administrator" in the pop-up menu.
2. Double-click [BEO] icon on the desktop to launch the program.
3. Click on [icon] icon on the toolbar, set 9600-8-N-1 and COM1 as appropriate. Click [Save Home(H)] to continue.
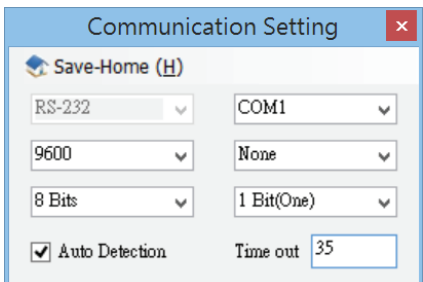
STEP6 - CONFIGURE THE SCANNER

1. Click on [icon] 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.
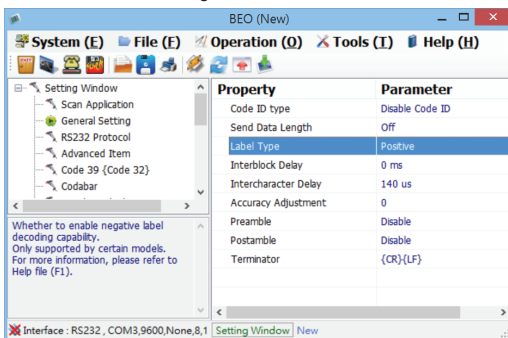
3. Click on [icon] icon on the toolbar to update scanner's parameters.
4. Click on [icon] icon on the toolbar if you want to save current configurations for later use.

ADVANCED - READING MODE & COMMAND

Serial Trigger Mode

1. The scanner with RS232 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 }

   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 interface. For full list of commands, please refer to Serial Command Manual which is available from our website or your local distributor.