# 2D MINI WIRELESS ... BARCODE SCANNER Quick Guide

For full user's manual, please contact your local distributor.



#### FCC WARNING STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- · Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the
  receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### CANADIAN DOC STATEMENT

This digital apparatus does not exceed the Class B limits for radio noise for digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de las classe B prescrites dans le Réglement sur le brouillage radioélectrique édicté par les ministère des Communications du Canada

#### CE MARKING AND EUROPEAN UNION COMPLIANCE

Testing for compliance to CE requirements was performed by an independent laboratory. The unit under test was found compliant with all the applicable Directives, 2004/108/EC and 2006/95/EC.

#### WASTE ELECTRICAL AND ELECTRONIC FOUIPMENT

The WEEE directive places an obligation on all EU-based manufacturers and importers to take-back electronic products at the end of their useful life.

### ROHS STATEMENT OF COMPLIANCE

This product is compliant to Directive 2002/95/EC.

### NON-MODIFICATION STATEMENT

Changes or modifications not expressly approved by the party responsible for compliance





- 1. Take any metals into contact with the terminals in connectors.
- Use the scanner where any inflammable gases.



- If following condition occur, immediately power off the host computer, disconnect the interface cable, and contact your nearest dealer.
- Smoke, abnormal odors or noises come from the scanner.
  - 2. Drop the scanner so as to affect the operation or damage its housing.

Do not do behavior below.

- Put the scanner in places excessively high temperatures such as expose under direct sunlight.
- Use the scanner in extremely humid area or drastic temperature changes.
- Place the scanner in oily smoke or steam environment such as cooking range.
- 4. Be covered or wrapped up the scanner in bad-ventilated area such as under cloth or blanket.
- Do Not
- 5. Insert or drop foreign materials or water into scanning window or vents.
  - $\ensuremath{\mathsf{6}}.$  Using the scanner while hand is wet or damp.
  - 7. Use the scanner with anti-slip gloves containing plasticizer and chemicals or organic solvents such as benzene, thinner, insecticide etc to clean the housing. Otherwise, it could not result fire and electrical shock but housing may be broken and injured.
  - Scratch or modify the scanner and bend, twist, pull or heat its interface cable.
  - 9. Put heavy objects on interface cable.
  - Do not stare the light source from the scanning window or do not point the scanning window at other people's eyes or eyesight may be damaged by direct exposure under the light.



Do not put the scanner on an unstable or inclined plane. The scanner may drop, creating injuries.



Once the interface cable is damaged such as exposed or broken copper wires, stop using immediately and contact your dealer. Otherwise, it could result fire or electrical shock.

- 1 -

# **OUT OF THE BOX**



2D Mini Wireless Barcode Scanner



Quick Guide & Quick Connection Card



Silicone Cover



USB Charger Cable



Neck Strap



Retractable Carabiner Badge Holder Reels

### INTRODUCTION



### **SPECIFICATIONS**

Sensor Area Image Sensor

Resolution 4mil/ 0.1mm (1D); 7mil/ 0.2mm (2D)

Memory 2MB

Indicator LED, Buzzer

PCS 30%

Housing Plastic (PC+ABS)
Profile SPP, HID

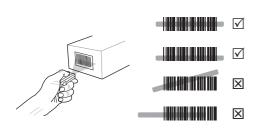
Battery Life 4260 scans

Charge Time 2 hours (fully charged)
Radio Bluetooth 2.1 + EDR (Class2)

Coverage 10M/33ft. (line of sight)
Symbologies All major 1D & 2D barcodes

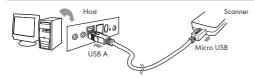
- 4 -

### **GETTING STARTED**



To scan a barcode, make sure the aiming beam crosses every bar and space of the barcode.

### **CHARGING THE BATTERY**



- 1. Flip open the micro USB port on the scanner.
- Insert the micro USB connector into the port on the scanner and USB A connector into a USB port on the host PC.

### **BEEPER INDICATION**

Single long beep Single beep Single short beep

gle beep Good read ale short beep The scanne

Two beeps

The scanner reads a Code39 of ASCII in configuration procedure

i. Wireless connection

ii. The scanner successfully reads a configuration barcode

Two short beeps Four beeps (Hi-Lo-Hi-Lo) Five beeps Three beeps Three short beeps

a contiguration barcode
Good read (Batch mode/Memory mode)
Out of range/Poor connection

Low power

Power up

Wireless disconnection

i The scanner reads a barcades

while disconnected.

ii. The scanner reads an unexpected barcode during configuration procedure. (scan [ABORT] to abort and start over)

Several short beeps

The scanner switches from one communication mode to another

### LED INDICATION

Off Flashing Green Green for 2 sec Flashing Red Solid Red Standby or Power off Disconnected or Discoverable Good Read

Low power Charging

- 6 -

- 5 -

### INTERFACE

E042\$

C035\$

C008\$

C006\$

.E043\$

**BT HID** 

BT SPP

INTERFACE

There are 5 interfaces for data transmission/collection:

1. BT HID - Emulates a Bluetooth HID keyboard that transmits each barcode data to the host after decode (See page 9)

2. BT SPP - Emulates a Bluetooth SPP device that transmits each barcode data to the host after decode. (See page 9)

3. Memory Mode - Emulates a USB mass storage device that saves each barcode data during off-line data collection (See page 26)

4. USB HID - Emulates a USB keyboard that transmits each barcade data to the host after decade

5. USB VCP - Emulates a USB virtual com device that transmit each barcode data to the host after decode.

USB HID

**USB VCP** 

### Function Sunnort Matrix

Turicus Support Matrix			
Interface	Batch Mode	Memory Mode	Ez Utility
BT HID	<b>√</b>		
BT SPP	✓		
Memory		✓	
USB HID			✓
USB VCP			✓
	Interface BT HID BT SPP Memory USB HID	Interface Batch Mode BT HID   BT SPP   Memory  USB HID	Interface Batch Mode Memory Mode BT HID  BT SPP  Memory USB HID

<sup>\*</sup>Note: For Ez Utility(PC-based software utility), please contact your local distributor - 8 -

- 7 -

Memory Mode

# GETTING CONNECTED ...

There are two modes of wireless communication:

.EO43\$



[ Recommended ]

BT mode - HID

1. Press the trigger for 1 second to activate the scanner.

- 2. Scan [DISCONNECT]
- 3. Scan [BT mode HiD]; the scanner will emit several beeps.

  4. Select "Wireless Scanner" from discovered device list
- 4. Select "Wireless Scanner" from discovered device list.
- The Bluetooth application may prompt you to scan a pincode(see PINCODE SETUP \( \text{section} \)) it generated.
- 6. The scanner will beep twice to verify the connection.

.E042\$



BT mode - SPP

- 1. Press the trigger for 1 second to activate the scanner.
- 2. Scan [DISCONNECT]
- 3. Scan [BT mode SPP]; the scanner will emit several beeps.
- 4. Select "Wireless Scanner" from discovered device list. The default pincode is "1234".
- 5. Open serial communication software with com port (see Device Manager) properly set up.
- 6. The scanner will beep twice to verify the connection.

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Disconnect

STEP 1

**Pincode Start** 



STEP 2

STEP 3

Enter

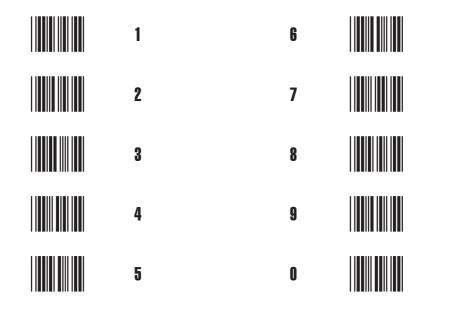


STEP 4

Pincode Stop



# NUMERIC BARCODES .



### **BATCH MODE** ...

.E054\$

**ENABLE** 



**DISABLE** 

In Batch Mode, data will be temporarily stored in memory buffer (2KB RAM) when the scanner is out of range or in poor connection quality. Once the scanner gets back in range, the stored data will be sent back to the host immediately, which will also be erased in memory buffer at the same time.

Batch Mode can only function in the following conditions:

- 1. The scanner is connected to a host device via BT HID/SPP.
- 2. The scanner is NOT in Memory Mode or USB HID/VCP Mode.

### **SMARTPHONE/TABLET CONNECTION**

### Getting Connected - iOS & Android

Simply follow instruction in [BT mode - HID] (page 9), in which step 5 can be skipped since iOS & Android will not require pin-code for connection.

# Touch Keyboard - iOS



To toggle iOS Touch Keyboard, please press this button.

# Touch Keyboard - Android

While connected with the scanner, the Touch Keyboard on the Android smartphone or tablet might disappear. To resolve this issue, please change settings on Android device with below steps:

- 1. Enter "Settings"
- 2. Enter "Language & input"
- 3. Tap on "Default keyboard"
- Turn off "Physical keyboard", or Turn on "On-screen keyboard" and the Touch Keyboard will function properly again.

### POWER OFF TIMEOUT

The period of inactivity before auto power-off.

### Variable Timeout

. BO3O\$



SET MINUTE (Range: 00 ~ 60)

.B029\$



SFT SFCOND

(Ranae: 00 ~ 60) The default timeout is 3 minutes 0 second

- For example, to set the timeout as 5 minutes 30 seconds: 1. Scan [Set Minute]
- 2. Scan [0] & [5] on page 11 & 12.
- 3. Scan [Set Minute]
- 4. Scan [Set Second]
- 5. Scan [3] & [0] on page 11 & 12.
- 6. Scan [Set Second]

# No Timeout (Scanner Always On)

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**DISABLE** TIMEOUT

### **RINARY CHECK CHARACTER**

**FNABLE** 



**DISABLE** 



Once enabled, a checksum will be added to the end of each data to conduct Xor calculation. For Bluetooth SPP & USB-VCP, the BCC is 1 byte. For Bluetooth HID, the BCC are 2 bytes.

### Example:

The barcade data is "TEST" with terminator <CR><LE>

1. Bluetooth SPP & USB-VCP:

2 Bluetooth HID:

However, since control character cannot be displayed in Bluetooth HID, BCC will be converted into 2 bytes of characters. As a result, the data will be: TEST + <Enter> + F + 1

### **GENERAL SETTINGS READING MODE** . FOO2\$ **DEFAULT TRIGGER** .P023\$ . FOO1\$ **ABORT FLASH** . A007\$ . FOO5\$ **CHECK CONTINUOUS VERSION BEEP MODE MOBILE DISPLAY MODE** F023\$ . AD34\$

**NORMAL** 



**DISABLE** 

FD24\$

# **KEYBOARD LAYOUT**

. CO10\$



# **ENGLISH** (USA) **ENGLISH**

(UK)

**FRENCH** 

(106 key) **CANADIAN** (FRENCH)

**JAPAN** 



**CANADIAN** (TRADITIONAL)



. CO29\$

**GFRMAN** 

**NORWEGIAN** 



**ITALIAN** 

**SPANISH** 

**PORTUGUESE** 

**SWEDISH** 



- 19 -

- 20 -

# KEYBOARD LAYOUT



# **ENABLE SYMBOLOGIES**



.GO10\$

### TFRMINATOR

. DO11\$

# . DO12\$

# CR



I F



CR + LF



**NONE** 



**SPACE** 



**TAB** 

# MEMORY MODE

# **Memory Mode**



After scanning the above barcode, the scanner will be able to collect barcode data off-line. The barcade data will be stored in the format of < Date >. < Time >. < Barcode Data > < CR >

To retrieve stored data, please connect the scanner to the host with cable, access removable storage device "MiniScan" from which you may open or copy the file "BARCODE.txt" to your computer.

To delete ONE stored data, please scan below barcode or press this button.



To delete ALL stored data, simply delete the file "BARCODE.txt" in the removable storage device "MiniScan" until you hear two beeps.

# MEMORY MODE



SET DATE

Example: To set Date to 2014-08-01 (Year-Month-Day):

1. Scan [Set Date]

2. Scan [1], [4], [0], [8], [0], [1] on page 11 & 12.

3. Scan [Set Date]



SET TIME

Example: To set Time to 08:10:30 am (Hr:Min:Sec)

1. Scan [Set Time]

2. Scan [0], [8], [1], [0], [3], [0] on page 11 & 12.

3. Scan [Set Time]

\* To avoid Time and Date being reset to factory default due to running out of battery, please fully charge the scanner for at least 3 hours before use

### MEMORY MODE

### DATA FORMAT



The default Data Format is <Date>, <Time>, <Barcode Data> below are items and their setup codes:

Code	Item	Code	Item	
2	Date	3	Time	
Λ	Barcade Data			

### Example:

To change Data Format to <a href="Sarcode">Sarcode Data</a>, <Date</a>, <Time>

1. Scan [Data Format]

2. Scan [4], [2], [3] on page 11.

3. Scan [Data Format]

### FIELD SEPARATOR



Default is comma ( , ) . You may replace it with any alphanumeric characters from the full ASCII table in Full User's Manual.

Example: To change Field Separator to Semicolon (;)

1. Scan [Field Separator]

2. Scan [;] from the full ASCII table.

3. Scan [Field Separator]

### MEMORY MODE

. ROO8\$

### **DATE FORMAT**

The default Date Format is DD/MM/YYYY (Code = 09), below is full list of available formats and their setup codes:

Code	Format	Code	Format
01	DD-MM-YYYY	09	DD/MM/YYYY
02	MM-DD-YYYY	10	MM/DD/YYYY
03	DD-MM-YY	11	DD/MM/YY
04	MM-DD-YY	12	MM/DD/YY
05	YYYY-MM-DD	13	YYYY/MM/DD
06	YY-MM-DD	14	YY/MM/DD
07	DD-MM	15	DD/MM
08	MM-DD	16	MM/DD

### Example:

To set Date Format to MM/DD/YY (Code = 12)

- 1. Scan [Date Format]
- 2. Scan [1], [2] on page 11.
- 3. Scan [Date Format]

### MEMORY MODE

### TIME FORMAT



The default Time Format is HH:MM:SS (Code = 01), below are available formats and their setup codes:

Code	Format	Code	Format
01	HH:MM:SS	02	НН:ММ

### Example:

To set Time Format to HH:MM (Code = 02)

- Scan [Time Format]
- 2. Scan [0], [2] on page 11 & 12.
- 3. Scan [TimeFormat]

# **TEST BARCODES**

### Code 39



Interleaved 2 of 5



### **Code 128**



12345678

### **EAN**



**QR Code** 



### **PDF417**



### **DataMatrix**

