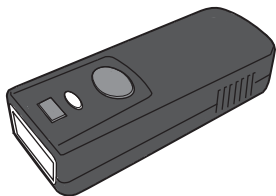


2D MINI WIRELESS BARCODE SCANNER Quick Guide

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.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

FCC Caution

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. To maintain compliance with FCC exposure compliance requirement, please follow operation instruction as documented in this manual.

WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT

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



WARNING AND CAUTION



1. Take any metals into contact with the terminals in connectors.
2. 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.

1. 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.

1. Put the scanner in places excessively high temperatures such as expose under direct sunlight.
2. Use the scanner in extremely humid area or drastic temperature changes.
3. 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.
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.
8. 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.

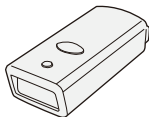


Once the interface cable is damaged such as exposed or broken copper wires, stop using immediately and contact your dealer. Otherwise, it could result fire or electrical shock.

OUT OF THE BOX



2D Mini Wireless
Barcode Scanner



Silicone Cover



Quick Guide &
Quick Connection Card



USB Charger Cable

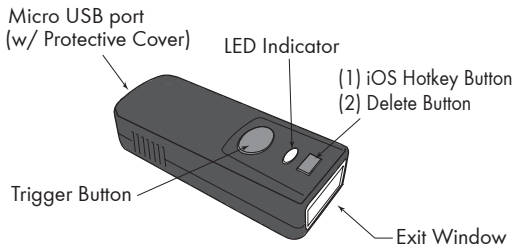


Neck Strap



Retractable Carabiner

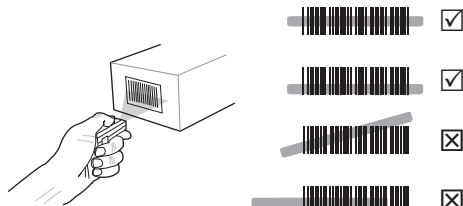
INTRODUCTION



SPECIFICATIONS

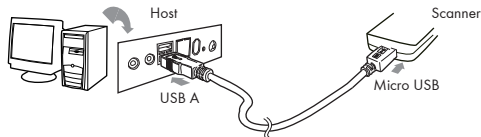
| | |
|--------------|-------------------------------------|
| Sensor | Area Image Sensor |
| Resolution | 4mil/ 0.1 mm (1D); 7mil/ 0.2mm (2D) |
| Memory | 2MB |
| Indicator | LED, Buzzer |
| PCS | 30% |
| Housing | Plastic (PC+ABS) |
| Profile | SPP, HID |
| Battery Life | 4260 scans |
| Charge Time | 2 hours (fully charged) |
| Radio | Bluetooth 2.1 + EDR |
| Coverage | 10M/33ft. (line of sight) |
| Symbologies | All major 1D & 2D barcodes |

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.
2. 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 | Power up |
| Single beep | Good read |
| Single short beep | The scanner reads a Code39 of ASCII in configuration procedure |
| Two beeps | i. Wireless connection ii. The scanner successfully reads a configuration barcode |
| Two short beeps | Good read (Batch mode/Memory mode) |
| Four beeps (Hi-Lo-Hi-Lo) | Out of range/Poor connection |
| Five beeps | Low power |
| Three beeps | Wireless disconnection |
| Three short beeps | i. The scanner reads a barcodes 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 | Standby or Power off |
| Flashing Green | Disconnected or Discoverable |
| Green for 2 sec | Good Read |
| Flashing Red | Low power |
| Solid Red | Charging |

INTERFACE

. E043\$



BT HID

. E042\$



BT SPP

. C035\$



Memory Mode

. C008\$



USB HID

. C006\$



USB VCP

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

Function Support Matrix

| Mode | Interface | Batch Mode | Memory Mode | Ez Utility |
|----------|-----------|------------|-------------|------------|
| Wireless | BT HID | ✓ | | |
| | BT SPP | ✓ | | |
| Tethered | Memory | | ✓ | |
| | USB HID | | | ✓ |
| | USB VCP | | | ✓ |

* Note: For Ez Utility(PC-based software utility), please contact your local distributor.

GETTING CONNECTED


There are two modes of wireless communication:

. E043\$



[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.
5. The Bluetooth application may prompt you to scan a pincode (see **PINCODE SETUP**  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.

. E031\$



Disconnect

PINCODE SETUP


STEP 1

Pincode Start

. E032\$



STEP 2

Scan numeric barcodes (see **NUMERIC BARCODES**  section on the next pages) based on the pincode generated by the Bluetooth application.

STEP 3

Enter

\$TX



STEP 4

Pincode Stop

. E033\$



NUMERIC BARCODES 📶



1



2



3



4



5

6



7



8



9



0



BATCH MODE

. E054\$



ENABLE

. E053\$



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:

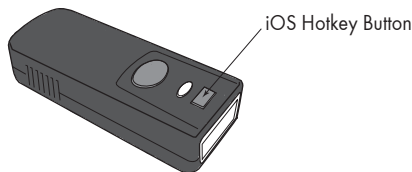
1. The scanner is connected to a host device via BT HID/SPP.
2. The scanner is NOT in Memory Mode or USB HID/VCP Mode.

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"
4. 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

. B030\$



SET MINUTE

(Range: 00 ~ 60)

. B029\$



SET SECOND

(Range: 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)

. B021\$



DISABLE
TIMEOUT

BINARY CHECK CHARACTER

ENABLE

. E029\$



DISABLE

. E030\$



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 barcode data is "TEST" with terminator <CR><LF>

1. Bluetooth SPP & USB-VCP:

Data Format = <T> + <E> + <S> + <T> + <CR> + <LF> + <BCC>.

BCC = $54h \wedge 45h \wedge 53h \wedge 54h \wedge 0Dh \wedge 0Ah = 11h$

2. Bluetooth HID:

Data Format = <T> + <E> + <S> + <T> + <Enter> + <BCC>

BCC = $54h \wedge 45h \wedge 53h \wedge 54h \wedge E7h = F1h$

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

. A001\$



DEFAULT

. P023\$



ABORT

. A007\$



CHECK
VERSION

BEEP MODE

. F023\$



NORMAL

. F024\$



MUTE

READING MODE

. F002\$



TRIGGER

. F001\$



FLASH

. F005\$



CONTINUOUS

MOBILE DISPLAY MODE

. A034\$



DISABLE

. A035\$



ENABLE

KEYBOARD LAYOUT

. C010\$



ENGLISH
(USA)

. C018\$



ENGLISH
(UK)

. C012\$



FRENCH

. C011\$



GERMAN

. C014\$



ITALIAN

. C013\$



SPANISH

JAPAN
(106 key)

. C009\$



CANADIAN
(FRENCH)

. C025\$



CANADIAN
(TRADITIONAL)

. C034\$



NORWEGIAN

. C029\$



SWEDISH

. C026\$



PORTUGUESE

. C031\$



KEYBOARD LAYOUT

. C017\$



CZECH
(QWERTY)

. C022\$



CZECH
(QWERTZ)

. C021\$



HUNGARIAN
(QWERTZ)

. C024\$



HUNGARIAN
(101 KEY)

. C016\$



SWISS
(GERMAN)

. C023\$



SWISS
(FRENCH)

BELGIAN
(AZERTY)

DUTCH

DANISH

SLOVAK

BRAZILIAN
(PORTUGUESE)

ALT CODE

. C030\$



. C028\$



. C027\$



. C032\$



. C033\$



. C015\$



ENABLE SYMBOLOGIES

. A002\$



ENABLE
ALL CODE

. K010\$



CODE 32

. L010\$



UK PLESSEY

. L001\$



MSI

. N001\$



INDUSTRIAL
2 OF 5

. M010\$



MATRIX
2 OF 5

. G010\$



CODE 93

. N017\$



IATA

. N032\$



GS1 DATABAR

. N010\$



GS1 DATABAR
LIMITED

. N026\$



GS1 DATABAR
EXPANDED

. G055\$



AZTEC

TERMINATOR

. D012\$



CR

. D011\$



LF

. D013\$



CR + LF

. D010\$



NONE

. D015\$



SPACE

. D014\$



TAB

MEMORY MODE

. C035\$



Memory Mode

After scanning the above barcode, the scanner will be able to collect barcode data off-line. The barcode data will be stored in the format of:

< Date >, < Time >, < Barcode Data > < CR >

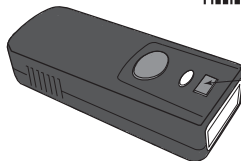
To retrieve stored data, please connect the scanner to the host with cable, access removable storage device "MiniScan" from which you may open or copy the file "BARCODE.txt" to your computer.

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

. R005\$



Delete Last Record



Delete 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

. R006\$



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]

. R007\$



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

. R011\$



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 |
| 4 | Barcode Data | | |

Example:

To change Data Format to <Barcode Data>, <Date>, <Time>

1. Scan [Data Format]
2. Scan [4], [2], [3] on page 11.
3. Scan [Data Format]

. R010\$



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]

. R008\$



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]

. R009\$



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 | HH:MM |

Example:

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

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

TEST BARCODES

Code 39



CODE-39 TEST

Interleaved 2 of 5



9876543210

Code 128



12345678

EAN



4 7 1 6 4 1 5 9 4 2 0 5 2

TEST BARCODES

QR Code



PDF417



DataMatrix

