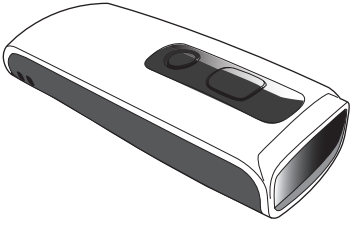
Mini Wireless Barcode Reader

Quick Guide



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

Mini Wireless Barcode Reader Quick Guide (Rev2)
P/N: 8012-0063000

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.

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 or more 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.

Any changes or modifications not expressly approved by the party responsible for compliance could void the authority to operate equipment.

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.
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.

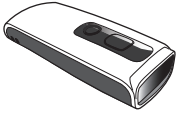
Do Not

Do not store 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



Mini Wireless
Barcode Reader

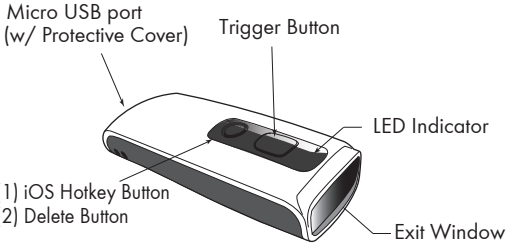
Quick Connection Card

Quick Guide

USB Charger Cable

Neck Strap

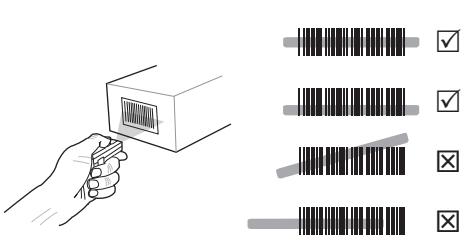
INTRODUCTION



SPECIFICATIONS

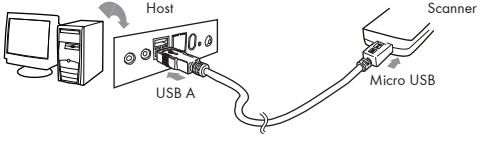
Sensor	Linear CMOS sensor
Memory	2MB (20,000 barcodes)
Indicator	LED, Buzzer, Vibrator
Resolution	3mil/ 0.075mm
PCS	30%
Housing	Plastic(PC)
Profile	SPP, HID
Battery Life	10000 scans
Charge Time	3 hours (fully charged)
Radio	Bluetooth 2.1 + EDR (Class 2)
Coverage	10M/33ft. (line of sight)
Symbologies	All major 1D barcodes incl. GS1 Databar

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 or smartphone/tablet adapter.

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
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)
Four beeps (Hi-Lo-Hi-Lo)	Out of range/Poor connection
Five beeps	Low power
Several short beeps	The scanner switches from one communication mode to another

LED INDICATION

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

INTERFACE

BT HID

BT SPP

Memory Mode

USB HID

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	On-line Operation	Off-line Operation	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$

[Recommanded]

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

SMARTPHONE/TABLET CONNECTION

Getting Connected - iOS & Android

1. Press the trigger for 1 second to power up the scanner.
2. Scan below configuration barcode to clear last pairing record.

. E031$

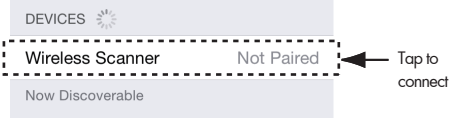
Disconnect

3. Scan below configuration barcode; the scanner will emit several beeps.

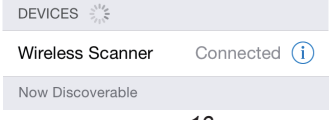
. E043$

BT mode - HID

4. Select "Wireless Scanner" from discovered device list.

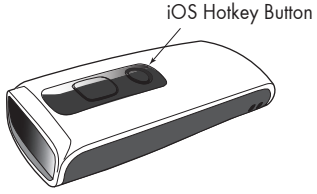


5. The scanner will beep twice to verify the connection.



SMARTPHONE/TABLET TOUCH KEYBOARD

Touch Keyboard - iOS

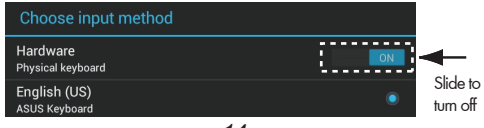


To toggle iOS Touch Keyboard, please press this button.

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 timeout 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 ^ 45h ^ 53h ^ 54h ^ 0Dh ^ 0Ah = 11h

2. Bluetooth HID:
Data Format = <T> + <E> + <S> + <T> + <Enter> + <BCC>
BCC = 54h ^ 45h ^ 53h ^ 54h ^ 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

READING MODE

TRIGGER

. F002$

FLASH

. F001$

CONTINUOUS

. F005$

BEEPER

. F012$

BEEP OFF

. F018$

BEEP ON

VIBRATOR

VIBRATOR OFF

. D035$

VIBRATOR ON

. D034$

KEYBOARD LAYOUT

. C010$

ENGLISH (USA)

. C018$

ENGLISH (UK)

. C012$

FRENCH

. C011$

GERMAN

. C014$

ITALIAN

. C013$

SPANISH

. C009$

JAPAN (106 key)

. C025$

CANADIAN (FRENCH)

. C034$

CANADIAN (TRADITIONAL)

. C029$

NORWEGIAN

. C026$

SWEDISH

. C031$

PORTUGUESE

KEYBOARD LAYOUT

. C017$

CZECH (QWERTY)

. C022$

CZECH (QWERTZ)

. C021$

HUNGARIAN (QWERTZ)

. C024$

HUNGARIAN (101 KEY)

. C016$

SWISS (GERMAN)

. C023$

SWISS (FRENCH)

. C030$

BELGIAN (AZERTY)

. C028$

DUTCH

. C027$

DANISH

. C032$

SLOVAK

. C033$

BRAZILIAN (PORTUGUESE)

. C015$

ALT CODE

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

. L014$

TELEPEN

. N032$

GS1 DATABAR

. N010$

GS1 DATABAR LIMITED

. N026$

GS1 DATABAR EXPANDED

TERMINATOR

. D012$

CR

. D011$

LF

. D013$

CR + LF

. D010$

NONE

. D015$

SPACE

. D014$

TAB

MEMORY MODE

. C035$

Memory Mode

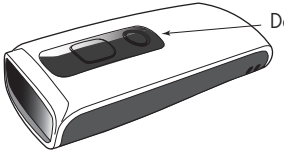
After scanning the above barcode, the scanner will be able to collect barcode data off-line. The barcode data will be stored in the format of:
< **Date** >, < **Time** >, < **Barcode Data** > < **CR** >

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



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

. 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.

. 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