2D WIRELESS RING ⌒ BARCODE SCANNER

Quick Guide

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

FCC WARNING STATEMENT

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 user's authority to operate the equipment.

CE MARKING AND EUROPEAN UNION COMPLIANCE

Testing for compliance to CE requirements was performed by an independent laboratory. The unit test was found compliant with all the applicable Directives, 2014/30/EU, 2014/35/EU and 2014/53/EU.

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.
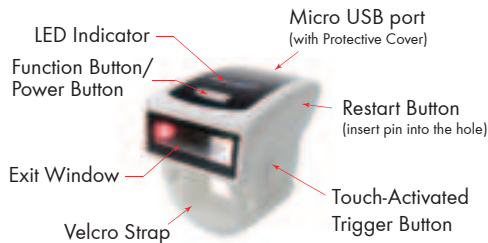
ROHS STATEMENT OF COMPLIANCE

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

CE FC RoHS

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 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 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.

INTRODUCTION

- LED Indicator
- Micro USB port (with Protective Cover)
- Function Button/ Power Button
- Restart Button (insert pin into the hole)
- Exit Window
- Velcro Strap
- Touch-Activated Trigger Button

SPECIFICATIONS

Sensor	Area Image Sensor
Resolution	5mil/ 0.1mm (1D), 6.67mil/ 0.2mm (2D)
Indicator	LED, Buzzer
PCS	40%
Housing	Plastic(PC+ABS)
Profile	BT HID, BT SPP, USB HID, USB VCP, Memory
Battery Life	4500 scans (1 scan/ 5 sec)
Charge Time	2.5 hours (fully charged)
Radio	Bluetooth 5.0 dual mode (Class2)
Coverage	10M/33ft. (line of sight)
Symbologies	All major 1D & 2D barcodes

BEEPER INDICATION

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 barcode while disconnected.
	ii. The scanner reads an unexpected barcode during configuration procedure. (scan [ABORT] to abort and start over)
	iii. Memory Full
Four beeps (Hi-Lo-Hi-Lo)	Out of range/Poor connection
Five beeps	Low power

LED INDICATION

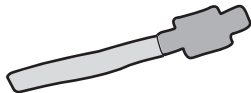|	
Off	Standby or Power off
Flashing Blue	Disconnected or Discoverable
One Green Flash	Good Read
Flashing Red	Low power
Solid Red	Charging

OUT OF THE BOX

Wireless Ring
Barcode Scanner

USB Charger Cable

Quick Guide

Hang Tag

Spare Velcro Strap

CHARGING THE BATTERY

Host

Scanner
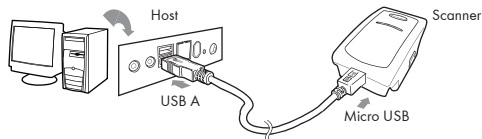
USB A

Micro USB

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.
3. Keep charging until the red LED indicator turns off.
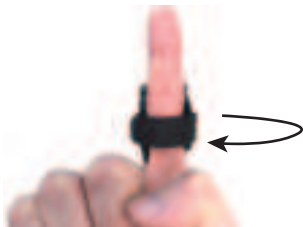
STEP 1 - GETTING STARTED

1. Pull open the long end and insert your index finger through the loop.

2. Adjust and attach the long end for a comfortable fit.

3. Clench your fist and use your thumb to tap the touch-activated trigger button. A gentle touch on the button will work; there is no need to press with force.

4. Aim at the barcode you wish to scan.

ATTENTION

1. If either your hand or the Velcro strap is soaking wet, the Laser beam may automatically light up without touch trigger. The scanner can still work well in this condition but it will waste battery power, so it is recommended to dry both your hand and the Velcro strap.
2. The following gloves have been tested to be working with the touch-activated button: latex examination glove, antistatic glove, white cotton glove (with or without latex coating), safety glove, and rubber glove. However, it is still recommended to operate with bare hand or thin glove to ensure the responsiveness of button.
3. Don't need to tighten Velcro strap too much. Just make the strap fit your finger so that the scanner will not easily move while being touched for trigger. We also suggest to release the strap from your finger for 1 minute after 2 hours of continuous use if your finger feels uncomfortable.

STEP 2 - BUTTON PREFERENCE

Scan one of below configuration barcodes to determine which touch-sensing button to enable according to your habit:

. F064$

Right Button Only
[For Left-handed User]

. F065$

Left Button Only
[For Right-handed User]

. F066$

Both Buttons

STEP 3 - INTERFACE SELECTION

Scan one of below configuration barcodes to determine your interface:

. E043$

BT HID
[Recommended]

. E042$

BT SPP

. C008$

USB HID

. C006$

USB VCP

. C035$

Memory Mode

1. **BT HID, BT SPP** - Emulates a **Bluetooth HID keyboard or Bluetooth serial device,** please see next page for details.
4. **Memory Mode** - Emulates a **USB mass storage device** that collects barcode off-line, please see page 24 - 28 for details.

GETTING CONNECTED 🔊

There are two modes of wireless communication:

. E043$

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[Recommended]
BT mode - HID

1. Press power button 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. If Bluetooth application requests for a pincode, see next page **PINCODE SETUP** 🔊, otherwise please skip this step.
6. The scanner will beep twice to verify the connection.

. E042$

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BT mode - SPP

1. Press power button 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. If pincode is requested, enter default pincode "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$

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Disconnect

PINCODE SETUP 🔊

STEP 1

Pincode Start

. E032$

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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

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STEP 4

Pincode Stop

. E033$

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‖‖‖‖‖‖‖ **1**	**6** ‖‖‖‖‖‖‖
‖‖‖‖‖‖‖ **2**	**7** ‖‖‖‖‖‖‖
‖‖‖‖‖‖‖ **3**	**8** ‖‖‖‖‖‖‖
‖‖‖‖‖‖‖ **4**	**9** ‖‖‖‖‖‖‖
‖‖‖‖‖‖‖ **5**	**0** ‖‖‖‖‖‖‖

POWER OFF TIMEOUT

The period of inactivity before auto power-off.

Variable Timeout

. B030$

SET MINUTE
(Range: 00 ~ 60)

. B029$

SET SECOND
(Range: 00 ~ 59)

The default timeout is 00 minute and 30 seconds.
For example, to set the timeout as 5 minutes 30 seconds:

1. Scan [Set Minute]
2. Scan [0] & [5] on page 13 & 14.
3. Scan [Set Minute]
4. Scan [Set Second]
5. Scan [3] & [0] on page 13 & 14.
6. Scan [Set Second]

No Timeout (Scanner Always On)

. B021$

DISABLE
TIMEOUT

Warning! This will cause the battery to drain quickly.

SMARTPHONE/TABLET TOUCH KEYBOARD

Please follow below instruction to toggle touch keyboard on smartphone/tablet.

iOS

To toggle iOS touch keyboard, please simply press the function button.

Function Button

Android

1. Enter "Settings"
2. Enter "Language & input"
3. In Keyboard & input window, tap "Default" to continue.
4. Turn off "Hardware - Physical keyboard", and the Touch Keyboard will function properly again.

GENERAL SETTINGS

. A001$	DEFAULT
. P023$	ABORT
. A007$	CHECK VERSION

BEEPER

. F019$	**BEEP ON**
. F012$	BEEP OFF

TERMINATOR

. D012$	**CR**
. D011$	LF
. D013$	CR + LF
. D010$	NONE
. D015$	SPACE
. D014$	TAB

KEYBOARD LAYOUT

Barcode	Layout	Layout	Barcode
`. C010$`	**ENGLISH (USA)**	JAPAN (106 key)	`. C009$`
`. C018$`	ENGLISH (UK)	CANADIAN (FRENCH)	`. C025$`
`. C012$`	FRENCH	CANADIAN (TRADITIONAL)	`. C034$`
`. C011$`	GERMAN	NORWEGIAN	`. C029$`
`. C014$`	ITALIAN	SWEDISH	`. C026$`
`. C013$`	SPANISH	PORTUGUESE	`. C031$`

KEYBOARD LAYOUT

. C017$

CZECH
(QWERTY)

. C022$

CZECH
(QWERTZ)

. C021$

HUNGARIAN
(QWERTZ)

. C024$

HUNGARIAN
(101 KEY)

. C016$

SWISS
(GERMAN)

. C023$

SWISS
(FRENCH)

BELGIAN
(AZERTY)

. C030$

DUTCH

. C028$

DANISH

. C027$

SLOVAK

. C032$

BRAZILIAN
(PORTUGUESE)

. C033$

ALT CODE

. C015$

ENABLE SYMBOLOGIES

. A002$

ENABLE
ALL CODE

. G036$

ENABLE
ALL 1D CODE

. G038$

ENABLE
ALL 2D CODE

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. Alternatively, you may press the function button once.

. R005$

DELETE LAST DATA

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

MEMORY MODE ▣ DATE & TIME SETUP

. R006$

SET DATE

Example: To set Date to 2017-08-01 (Year-Month-Day):
1. Scan [Set Date]
2. Scan [1], [7], [0], [8], [0], [1] on page 13 & 14.
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 13 & 14.
3. Scan [Set Time]

> * Full drain of battery may cause the Time and Date to stop.
> To avoid this, please, please fully charge the scanner for
> at least 1 hour before use.

MEMORY MODE ▣ DATA FORMAT

. R011$

DATA FORMAT

The default Data Format is <Date>, <Time>, <Barcode Data> only
below are all items available for display and their 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 13.
3. Scan [Data Format]

. R010$

FIELD SEPARATOR
(DELIMITER)

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 ▣ DATE FORMAT

. R008$

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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 13.
3. Scan [Date Format]

MEMORY MODE ▣ TIME FORMAT

. R009$

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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 13 & 14
3. Scan [Time Format]

HOW TO REMOVE VELCRO STRAP

1. Pull open the long end.

2. Pull out the long end through the slot.

3. Pull open the short end on the other side.

4. Remove the whole Velcro strap from the scanner by pulling the long end.

HOW TO INSTALL VELCRO STRAP

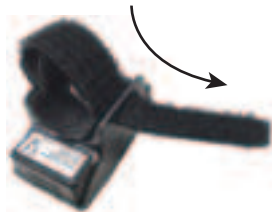1. Insert the short end through the slot, with Velcro side facing upwards.

2. Attach the short end to the long end to close.

3. Insert the long end through the other slot, with Velcro side facing upwards.

4. Attach the long end to itself to close.

TEST BARCODES

Code 39

CODE-39 TEST

Interleaved 2 of 5

9876543210

Code 128

12345678

EAN

4 716415 942052

TEST BARCODES

QR Code

Micro QR Code

PDF417

Data Matrix

Aztec