

# MS912+ WIRELESS BARCODE SCANNER Quick Guide

For more detailed scanner setting, please go to www.ute.com to download the user manual and scanner configuration manager utility.





Version 1.5

#### 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 augrantee 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 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.

#### **BOHS STATEMENT OF COMPLIANCE**

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

#### NON-MODIFICATION STATEMENT

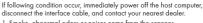
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

# WARNING AND CAUTION

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



2. Use the scanner where any inflammable gases.



- 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 chanaes.
- 3. Place the scanner in oily smoke or steam environment such as cooking ranae.
- 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 Do Not
  - 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**

## INTRODUCTION



Mini Wireless Barcode Reader



NUMERIC BARCHER A	
	1
100	2
100/0	1
100	4
000	5

Quick Guide

Quick Connection Card





Hand Strap

USB Charger Cable



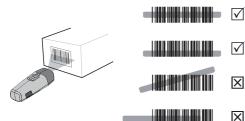
## **SPECIFICATIONS**

Light source 625nm visible red LED Scan rate 650 scans/sec Sensor Linear CMOS sensor Resolution 4mil/ 0.1mm PCS 30% Housina Plastic(PC+ABS) Profile SPP, HID Battery Life 6000 scans (1 scan/ 5 sec) Charge Time 2 hours (fully charged) Coverage 10M/33ft. (line of sight) **Operating Temp** 0 to 50°C (32°F to 122°F) Symbologies All major 1D barcodes incl. GS1 Databar

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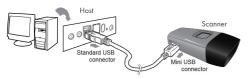
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## **GETTING STARTED**



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

## **CHARGING THE BATTERY**



- 1. Flip open the mini USB port on the scanner.
- 2. Insert the mini 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

Two beeps

Two short beeps Four beeps (Hi-Lo-Hi-Lo) Five beeps Three beeps Three short beeps Power up Good read

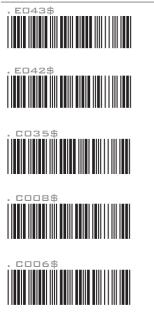
- The scanner reads a Code39 of ASCII in configuration procedure
- i. Wireless connection
- ii. The scanner successfully reads a configuration barcode Good read (Auto mode)
- Out of range/Poor connection Low power
- Wireless disconnection
- i. The scanner reads a barcodes while disconnected.
- ii. The scanner reads an unexpected barcode during configuration procedure. (scan [ABORT] to abort and start over)
  The scanner switches from one communication mode to another

Several short beeps

## 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 -

## **INTERFACE SELECTION**



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<u>BT HID</u>

BT SPP

Batch Mode (MS912M+ only)

USB HID

USB VCP

**INTERFACE SELECTION** 

There are 5 interfaces for data transmission/collection:

- BT HID Emulates a Bluetooth HID keyboard that transmits each barcode data to the host after decode. This interface is recommended for Bluetooth connection. (See page 9 for details)
- 2. BT SPP Emulates a Bluetooth SPP device that transmits each barcode data to the host after decode. (See page 9 for details)
- Batch Mode Emulates a USB mass storage device that saves each barcode data during off-line data collection (See page 25)
- USB HID Emulates a USB keyboard that transmits each barcode data to the host after decode. This interface is recommended for tethered connection.
- 5. USB VCP Emulates a USB virtual com device that transmit each barcode data to the host after decode.

## GETTING CONNECTED .M

# PINCODE SETUP .M

There are two modes of wireless communication:





- 1. Press and hold 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** *A* section) it generated.
- 6. The scanner will beep twice to verify the connection.

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BT mode - SPP

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

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

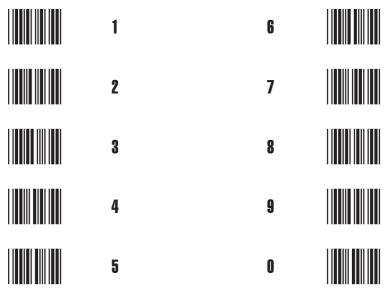




#### STEP 2

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





# **POWER OFF TIMEOUT**

The period of inactivity before auto power-off.

# Variable Timeout



SET MINUTE (Range: 00 ~ 60)



SET SECOND (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)





# **SMARTPHONE CONNECTION**

# Getting Connected - iOS & Android

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

# Touch Keyboard - iOS

## ENABLE IOS HOTKEY

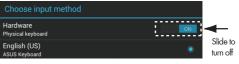


After enabling iOS Hotkey(disabled by default), you may simply <u>double-click the trigger</u> to toggle the iPhone/iPad Touch Keyboard.

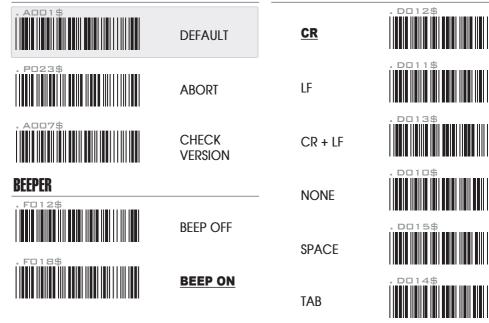
# Touch Keyboard - Android

Please follow below steps to toggle Android virtual keybaord:

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



## **GENERAL SETTINGS**



TERMINATOR

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# **KEYBOARD LAYOUT**



# **KEYBOARD LAYOUT**



## **ENABLE SYMBOLOGIES**



## **BINARY CHECK CHARACTER**



ENABLE

### 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 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

## AUTO MODE

Being out of range, the scanner will temporarily keep scanned data in its memory buffer(2K RAM) until the buffer is full. The scanner will send all stored data back to the host after getting in range.

\*Note: Auto Mode will not function when Batch Mode is enabled, or no connection is made beforehand.

## BATCH MODE 🔳

For MS912M+ only

The following pages only apply to the batch version mini wireless scanner, MS912M+ (P/N: MS912-FUBB00-SG/TG), which can be easily distinguished by an "M" mark on the rear of the scanner.



## BATCH MODE 🔳

## DATA FORMAT 🔳

# . Co35\$

#### BATCH 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 :



#### 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.

## DATA FORMAT



The default Data Format is <Date>, <Time>, <Barcode Data> below are all items available for display and their codes:

Code	ltem	Code	ltem
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]

#### FIELD SEPARATOR



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

Example: To change Field Separator to Semicolon (;)

- 1. Scan [Field Separator]
- 2. Scan [;] from the full ASCII table.
- 3. Scan [Field Separator]

## DATE FORMAT 🔳

## TIME 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]

## 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]

## DATE & TIME SETUP

For MS912M+ only





SET DATE

Example: To set Date to 2012-08-01 (Year-Month-Day):

1. Scan [Set Date]

2. Scan [1], [2], [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 low on battery, please fully charge the scanner for at least 2 hours before use.









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