mHand H6 User Manual Rev. 1.0

Model: mHand H6

Table of Content

FCC statement

FCC NOTICE:

To comply with FCC part 15 rules in the United States, the system must be professionally installed to ensure compliance with the Part 15 certification. It is the responsibility of the operator and professional installer to ensure that only certified systems are deployed in the United States.

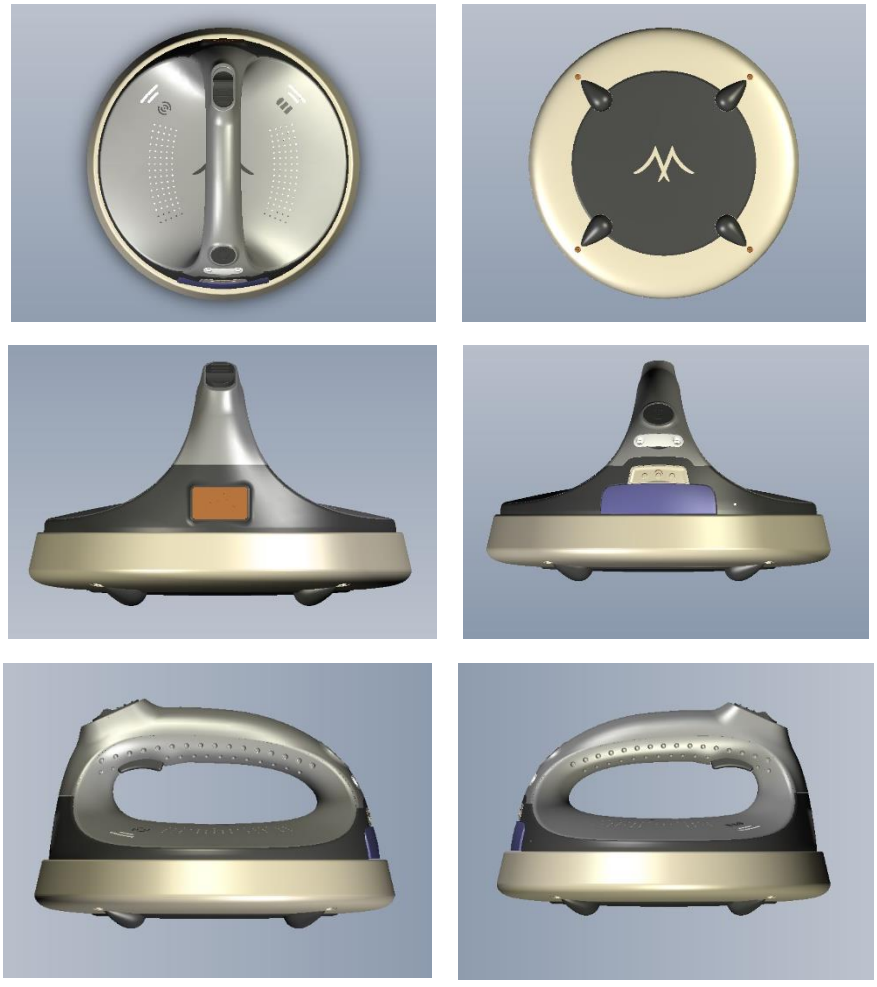
The use of the system in any other combination (such as co-located antennas transmitting the same information) is expressly forbidden.

CE statement

CE NOTICE:

The CE Mark applies to products regulated by certain European health, safety and environmental protection legislation. The CE Mark is obligatory for products it applies to: the manufacturer affixes the marking in order to be allowed to sell his product in the European market.

Chapter 1 Introduction of mHand H6



1.1 Overview of mHand H6:

mHand H6 is an UHF EPC C1G2 mobile RFID handheld with Bluetooth technology, the plug & play Bluetooth connectivity increases the flexible on the RFID stock-take through Bluetooth enabled mobile device. Lightweight and OS independent, the ergonomic design with enhanced reading sensitivity.

- The mHand H6 Intelligent RFID Reader supports protocols, UHF CLASS 1 GEN2 EPC C1G2/ISO 18000-6C, 902-928 MHz RFID frequency band in United States.

1.2 Ports Description

(1) Battery charging port

Input port of the mHand H6:

Items no.	*Name*	*Description*
1	USB-C jack	5V/2A dc power supply input

1.3 Buttons in mHand H6

Items no.	*Name*	*Description*
2	Power ON Button	Press to switch the device on
3	Battery removable button	Press to unlock battery
4	Reading Lock	Switch on to retain reading function
5	Read Button	Press to start reading

1.4 Indicators LEDs in mHand H6

Bluetooth is not connected

The mHand H6 has different LEDs to indicate the reader status.

Items no.	*Name*	*Description*
6	Blue and white LED	Blue LED On means the BT is connected; White LED On means the BT is turn on and ready to use
7	Red and Green LED	Red flashing is low battery; Red On is battery charging; Green is full charged

1.5 Specification:

Item	Specification
Input	1 power On button
	1 read button (and Hold key)
indicator	Red LED stand for charging Red LED flashing stand for low battery Green LED stand for fully charged White LED stand for BT on but not connected Blue LED stand for BT on and connected
Connectivity	Bluetooth module with UART interface
Battery	5000mAh standard battery
Charger	5V 2A ac to dc power adapter
Bluetooth	Bluetooth 4.0
Talk/ Standby time	2.5 Hours continuous operation
Charging time	Charge completion <6.5 hours
Operation temp.	0 to +40 deg C
Storage temp.	-20 to +60 deg C
Operating Humidity	20% to 90%

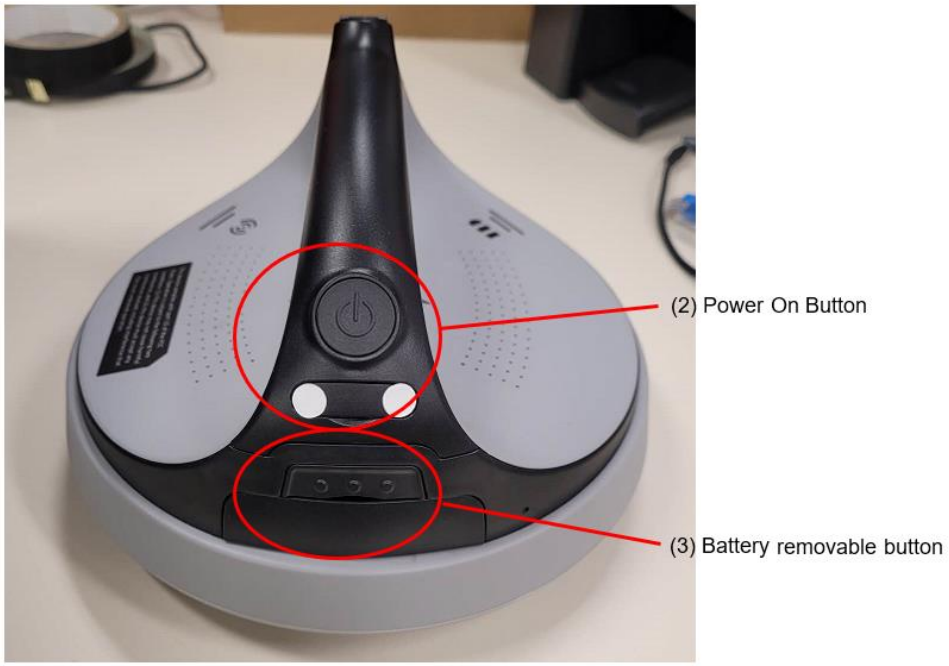
Features	1 Watt (30dBm) Tx output levels Adjustable output Tx power levels over +5 to 30dBm range in 1dB steps High durability in harsh environments Easy installation and maintenance All-in-one compact design Fanless Design for protection of dirt, dust, insects, liquids Supporting tag interface of EPC C1G2/ISO 18000-6C(UHF C1G2), Dense Reader Mode Capability Rechargeable Light Weight

Chapter 2 Installation of mHand H6

2.1 Start-up Procedure of mHand H6

This section explains how to set-up mHand H6 and connect the mHand H6 to your computer:

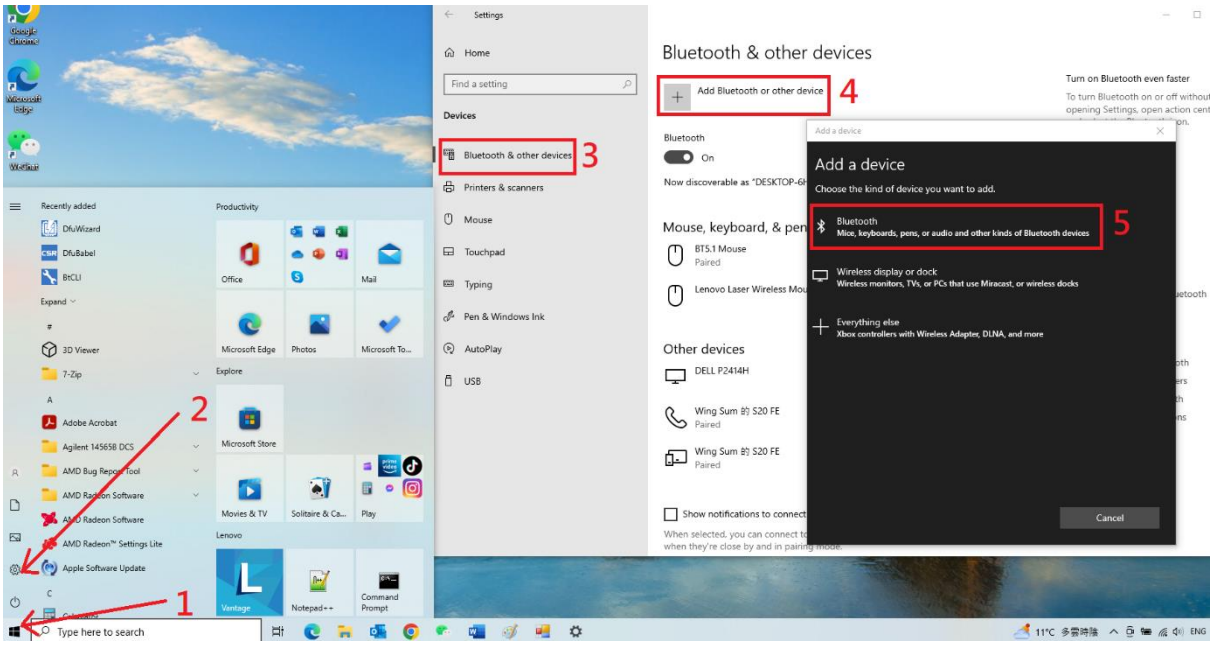
I. Power On the mHand by pressing the Power On button.

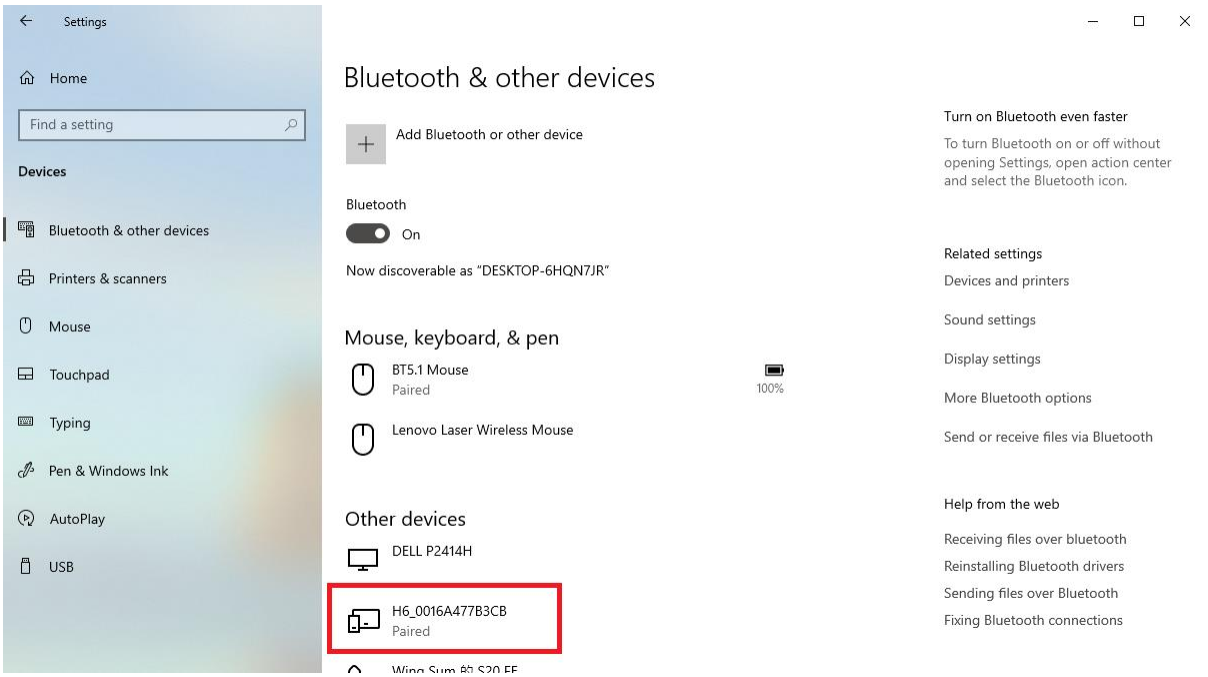


II. White LEDs light up, which indicates the Bluetooth is ready.

III. Search and Pair the Bluetooth with your Win10 computer: • In startup setting, choose “Bluetooth & other devices”.

- In “Bluetooth & other devices”, choose “Add Bluetooth or other device”
- In “Add a device”, press the button “Bluetooth”, then select mHand BT address to pair. In general, the mHand BT name is called
  “ H6_XXXXXXXXXXXXX”



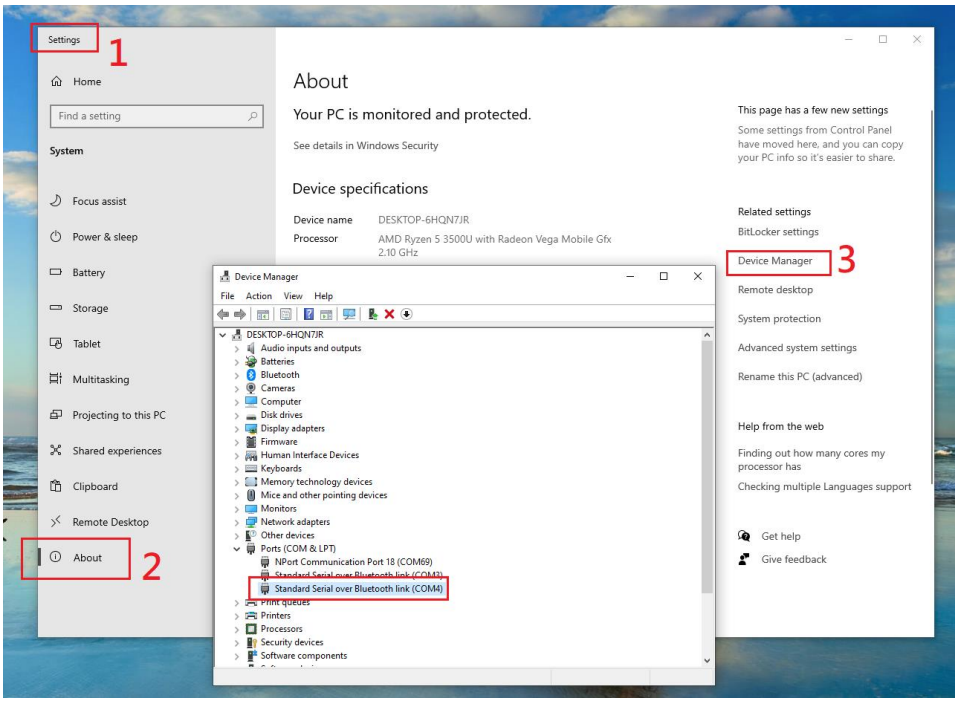


IV. mHand H6 operates at UHF frequency band, ranging from FCC 902-928 MHz, SRRC 920-925 MHz, KCC 917-920.8 MHz, ACMA 920-926MHz, MIC 916.8-923.4MHz); the setting depends on countries' regulations.

V. When the Bluetooth is connected, LEDs turn blue.

VI. After BT is connected, then run the program or apps like "UniversalReaderAssistant" in the computer to control the mHand operation.

VII. Set the “COM” number in the program which is generated after paired. The “COM” number can be found in the device manager in the computer.



VIII. Run the program.

2.2 Environmental Requirements

The next table includes environmental requirements for the mHand H6. Choose a location that meets these requirements.

Description	Minimum	Maximum
Operating temperature	0ºC	40ºC
Storage temperature	-20ºC	60ºC
Humidity (non-condensing)	20%	90%

2.3 Caution

Danger of Electric Shock

- Disconnect the device from the electric supply before cleaning or performing maintenance on the machine.
- Keep this device dry.
- Turn off or unplug the machine when it is not in use.

Please read the information contained within this user manual prior to attempting installation and operation of the RFID Reader. Failure to install and operate the RFID Terminal (mHand H6) in accordance with the information contained in this manual may result in unsatisfactory performance.

Chapter 3 Demonstration of RFID Applications

3.1 Creating RFID Application with mHand H6

mHand H6 is an intelligent reader and compliance with EPC global C1G2/ISO 18000-6C, Users can develop own UHF RFID application on this platform.

3.1.1 Delivering Application to mHand H6

When the user wants to deliver applications to the mHand H6, they just simply install the program in Windows and Linux platform.

3.1.2 Programming Language compatibility

Users may use several types of programming language, for examples, C++, C#.NET, Java and Java script.

Chapter 4 Regulatory Information

4.1 Federal Communications Commission (FCC) Compliance

4.1 Federal Communications Commission (FCC) Compliance

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

NOTE: 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.

WARNING: DO NOT ATTEMPT TO SERVICE THE WIRELESS COMMUNICATION DEVICE YOURSELF. SUCH ACTION MAY VOID THE WARRANTY. THE MHAND H6 IS FACTORY TUNED. NO CUSTOMER CALIBRATION OR TUNING IS REQUIRED. CONTACT MEGABYTE LTD. TECHNICAL SUPPORT FOR INFORMATION ABOUT SERVICING YOUR WIRELESS COMMUNICATION DEVICE.

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

4.2 CE Compliance

This device has been tested to and conforms to the regulatory requirements of the European Union and has attained CE Marking. The CE Mark is a conformity marking consisting of the letters "CE". The CE Mark applies to products regulated by certain European health, safety and environmental protection legislation. The CE Mark is obligatory for products it applies to: the manufacturer affixes the marking in order to be allowed to sell his product in the European market.

The CE Marking is not a quality-mark. Foremost, it refers to the safety rather than to the quality of a product. Secondly, CE Marking is mandatory for the product it applies to, whereas most quality markings are voluntary.

the SAR limit of 4.0 W/kg over any 10 grams of tissue. The device complies with RF specifications when used at a distance of 10 mm from your Extremity. The highest reported SAR value: Extremity SAR: 1.69 W/kg.

Chapter 5 Disclaimer Notice

Disclaimer Notice

The manufacturer shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance or use of this material. This document contains proprietary information, which is protected by international patent applications and copyright. All rights reserved. No part of this document may be copied, reproduced or translated without prior written consent of the manufacturer. The manufacturer reserves the right to revise this publication and to make changes from time to time in the contents hereof without obligation to notify any person of such revisions or changes. The manufacturer also reserves the right to change the specifications without notice.

Chapter 6 Warranty

1. Megabyte Ltd warrants to the User that the Products sold to the User will comply with their published specifications and will be of satisfactory quality and that Megabyte Ltd is entitled to sell the Products to the User. Megabyte Ltd warrants that for a period of twelve (12) months from date of purchase ("the Warranty Period"), the products will be free from defects in materials and workmanship.

2. During the Warranty Period, Megabyte Ltd will repair, or if in Megabyte Ltd's opinion necessary replace, the defective product returned to Megabyte Ltd's head office in Hong Kong. The defective production must be returned in its original packaging and all shipping and handling charges shall be borne by the Users.

3. The Warranty Period shall not be extended by reason of any repair or replacement.

4. Megabyte Ltd shall have no liability to the User for any damage to or defects in any of the Products caused by fair wear and tear, improper use, negligent handling, failure to observe this User Manual and the instructions accompanying the Products or any alterations maintenance or repair to the Products by any person other than Megabyte Ltd, use of non-Megabyte Ltd parts, accessories or equipment, or third party software which would damage the Products.

5. Unless in the case of any damage to or defect in the Products which would have been apparent on reasonable visual inspection, the User notifies Megabyte Ltd of the same in writing within 7 days after the date of purchase thereof, or in the case of any damage to or defects in the Products which would not have been apparent on reasonable visual inspection the User notifies Megabyte Ltd of the same in writing 7 days after the defect becomes apparent to the User, the User shall not be entitled to reject the Products concerned.

6. The User shall be responsible for properly storing and making backup copies of all data which may be stored in the Products. Megabyte Ltd shall not be responsible for any lost of data as a result of any repair or replacement.

7. Except as expressly provided in this User Manual no warranty, condition, undertaking, or term, express or implied, statutory or otherwise, as to the condition, quality, performance, durability or fitness for purpose of the Products is given or assumed by Megabyte Ltd and all such warranties, conditions, undertakings and terms are hereby excluded to the fullest extent permitted by law.

Chapter 7 Support

Technical support/Sales Enquiry can be obtained from Megabyte Ltd.

Please email to: jimmywong@myndar.com