



## **I-Collect 2.0 Operation Manual**

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## 1 Safety Notes

Do not use I Collect 2.0 while driving. It can expose to serious accident. Using I Collect 2.0 while driving may defend against law.

Do not touch charging plug with wet hand. It may cause electric shock.

Be aware of handling battery. Do not apply big impact or drill into it. Avoid damping the battery or submerge into water. Avoid metallic contact with the battery.

Do not expose I Collect 2.0, battery or charger to excessive heat. It may cause I Collect 2.0's corruption or explosion.

If I Collect 2.0 has been left in a car, as temperature increases it may cause explosion.

Do not use I Collect 2.0 in event of thunder and lightning. Using I Collect 2.0 in lightning condition can cause electric shock.

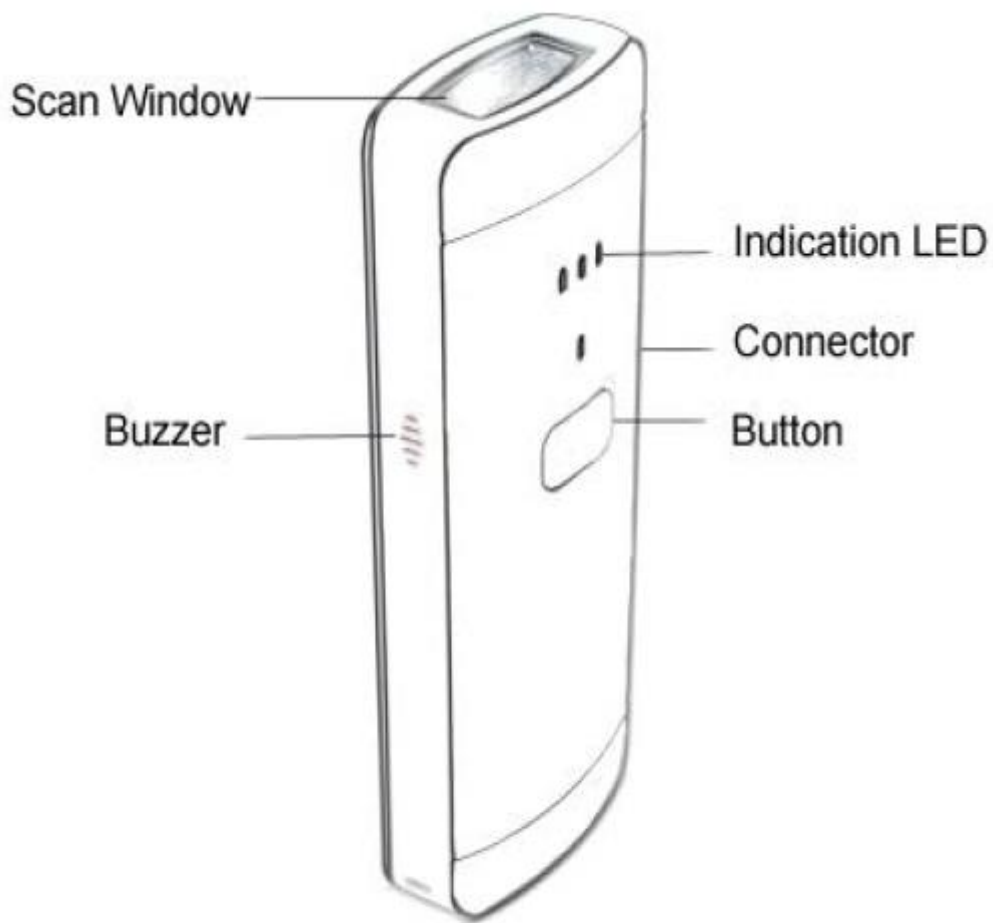
Avoid use of I Collect 2.0 in restricted area. It can cause radio interference.

Avoid use of I Collect 2.0 within aircraft. It can interfere with the navigational system of the vessel.

Avoid use of I Collect 2.0 within hospital. It can interfere with the medical equipment.

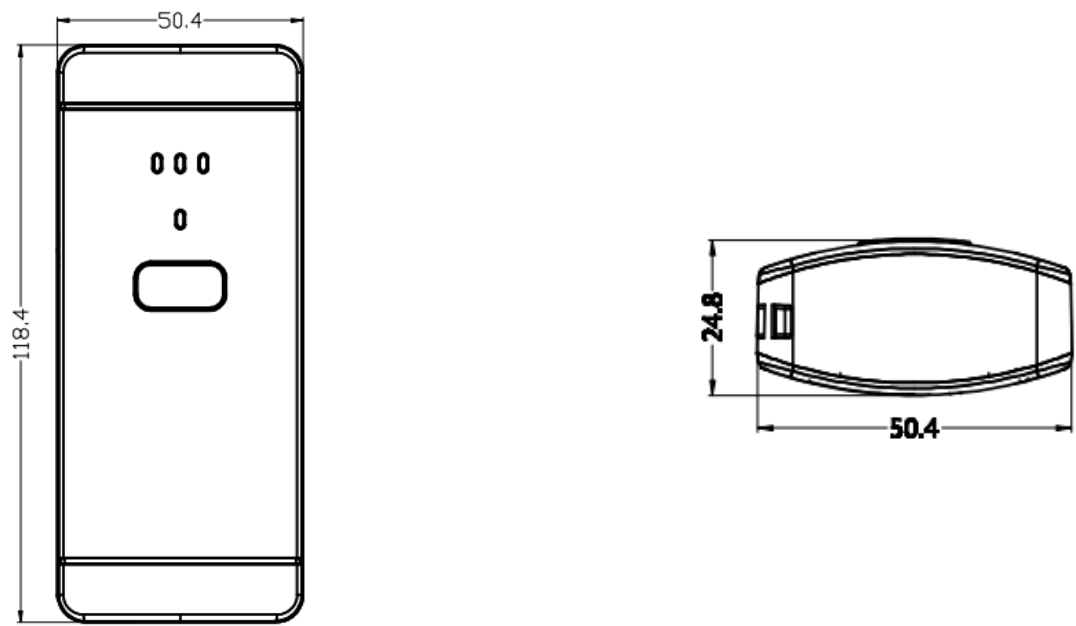
Turn off I Collect 2.0 in explosion risk area. Please obey rules of explosion risk area. It is safe to turn off I Collect 2.0 in patrol station.

## 2 Product Description



LED Indication	Description
RED Light-ON	Charging
RED Light-OFF	Not Charging
GREEN Light-ON	Not decoding
GREEN Light-OFF	Decode successfully (off for short time)
Single BLUE Light-ON	Pairing success or USB connecting
Dual-BLUE flicker alternately	Bluetooth HID Pairing mode

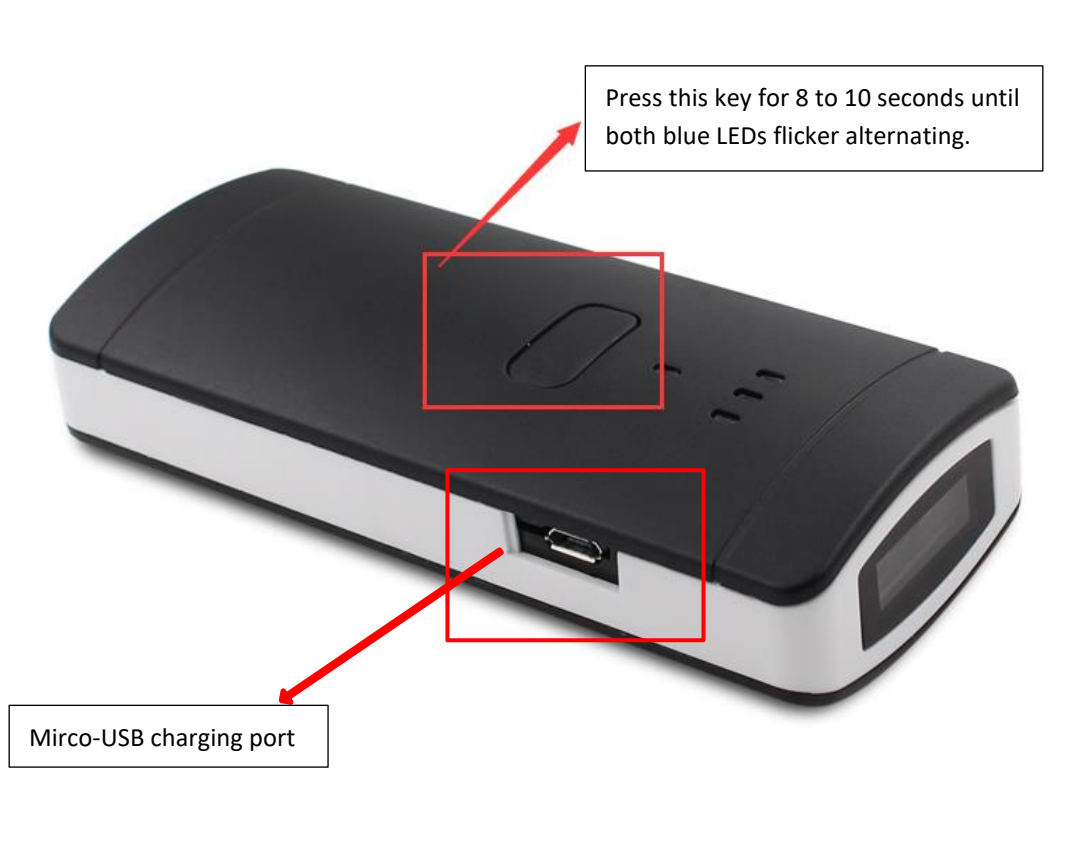
3    Dimensions in mm



## 4 General operation

The I-Collects are delivered in the standard configuration with HID emulation, all other settings can only be made after downloading the documentation and software.

Open Bluetooth settings on Android, iOS or Windows to get connecting with the device, when one blue light and green light on and buzzer sounds means pairing successfully.



After then, open any text access tab, the data will be output as keyboard emulation

For the RFID Reader, when device power on, the reader will be on working automatically, and when slot the card, the card UID will be displayed on any text access tab.

The internal storage is 2 Megabyte which can store up to 100000 barcodes and UIDs.

If you connected the device with your PC or smartphone, it should auto-connect again, if both devices have Bluetooth enabled.

You can charge the device via micro USB.

With a full charged battery the device can be used for app. 14000 scanning operations times in total.

When the device is turned off and then turned back on, it connects to the device it was last connected to.

## 4.1 System Setup Codes



Enter Setup



Exit Setup



Pairing Mode



Factory Reset



Sleep for 5 seconds (default)



Sleep for 10 seconds



Sleep for 30 seconds



Never Sleep



Open Double-click Popup/Hid HID keyboard (iOS)



Close Double-click Popup/Hid HID keyboard (iOS)

## 4.2 Pairing the Device with a PC or Handheld Computer

### Method 1

1. After scanner power-on, the steady green LED shows that the device is on.
2. Scan "Enter Setup" code, then scan "Pairing mode" and then scan "Exit Setup".
3. Now both blue LEDs will flicker alternately.
4. Now connect with the device with your PC or Smartphone. The device name is „BarCode Scanner HID“.
5. Wait Blue LED and Green light-on and Buzzer beeps, then the pairing succeed

### Method 2

1. After scanner power-on, the steady green LED shows that the device is on.
2. Keep the button pressed for app. 8 seconds until the device confirms with a "beep".
3. Now both blue LEDs will flicker alternately.
4. Now connect with the device with your PC or Smartphone. The device name is „BarCode Scanner HID“.
5. Wait until a single blue LED lights steady and the buzzer signals, then the pairing was successful.

Note: During pairing processing, double pressing the button will exit "Pairing mode"; if connection is not successful within 1 minute, it also exits the "Pairing mode".



### 4.3 Configure Operation Mode

Note: The following setting codes do not need the additional Enter/Exit setup codes.



Normal Mode (Default)



Storage Mode



Display number of entries in storage memory



Upload data from storage memory via Bluetooth HID function to PC.

Please be sure a word processor is open to fetch the data.

This upload does not delete the data in the storage memory. So, if something fails during upload, you can repeat this step.



Erase data in storage memory

### 4.4 Change Bluetooth name

#### Steps to set Bluetooth name

Scan "Bluetooth name setting" first, then scan another barcode which will become the Bluetooth name of this scanner.

Remark: 1. The longest Bluetooth name can be 16 bytes. If the barcode of the Bluetooth more than 16 bytes, the Bluetooth will only take the first 16 bytes as Bluetooth name. 2. Full Bluetooth name format including: Bluetooth name + protocol type, and you only can change the Bluetooth name. After you changed the Bluetooth name, all Bluetooth name with different protocol type will change at the same time. For example, you change Bluetooth name into "Scanner" in HID mode, then the Bluetooth name will be "ScannerHID". In SPP and BLE protocol, it will be "ScannerSPP" and "ScannerBLE".



Bluetooth name setting



Exit Setup



Read Bluetooth name

## 5 Configuration via Software

### 5.1 Windows

The software for configuration can be downloaded on our website. You can configure the device, if you scan the QR-Code, which is generated from the software, after you pressed create code.

**CONFIGURATION TOOL**  
FILE ABOUT EXIT

**SYSTEM CONFIGURATION**

FUNCTION LIST: Storage Data Upload **CREATE CODE**

*NOTE: PLEASE REFER TO DETAIL USER MANUAL*

**RFID OUTPUT FORMAT**

WORKING MODE: 14443A UID-LSB

MEMORY ADDRESS: 0 DATA POSITION: 0 DATA LENGTH: 16

KEY TYPE: KeyA KEY: FFFFFFFFFF

OUTPUT FORMAT: **CREATE CODE**

**SETTING CODE**

For further use

PLEASE SCAN THIS CODE TO SET COLLECTOR'S WORKING MODE

Annotations:

- Select the function, which you want to use, then select "create code".
- Create the Code, for scanning with the I-Collect 2.0
- Select the output format
- Select the block
- Select start address
- How many Bytes to output (max. 16)
- Input access Key. Standard Key is: FFFFFFFFFF
- Select Keytype (for more information refer to mifare documents)
- Scan this code with the I-Collect 2.0, to change the settings of the reader

## 5.2 Android and IOS

The screenshot shows the 'CONFIGURATION' screen of the I-Collect 2.0 app. The interface includes a status bar at the top with network and battery information. The main content area is titled 'SYSTEM CONFIGURATION' and contains several sections: 'FUNCTION LIST' with 'Exit Setup' and 'CREATE CODE' buttons; a note about the user manual; 'RFID OUTPUT FORMAT' with a 'Select the output format' annotation; 'WORKING MODE' with '14443A UI..' and a 'CREATE CODE' button; 'MEMORY ADDR' with '00', 'POS 0', and 'LENGTH 1' fields; 'KEY' with 'KEYA' and 'FF FF FF FF FF FF' options; and a 'SETTING' section with a QR code. Annotations provide instructions for each step: choosing a function, creating a code, selecting output format, selecting start address, selecting a block, selecting key type, inputting an access key, and scanning the QR code to set the working mode.

Netz 3G 304B/s 86 % 13:36

**CONFIGURATION**

**SYSTEM CONFIGURATION**

**FUNCTION LIST** Exit Setup **CREATE CODE**

NOTE: PLEASE REFER TO DETAIL USER MANUAL WHEN DO SETTING!

**RFID OUTPUT FORMAT** Select the output format

**WORKING MODE** 14443A UI.. **CREATE CODE**

**MEMORY ADDR** 00 **POS** 0 **LENGTH** 1

**KEY** KEYA **KEY** FF FF FF FF FF FF

**SETTING**

Select Keytype (for more information refer to mifare documents)

How many bytes should be output (max. 16)

Input access Key.  
Standard Key is : FFFFFFFFFF

Scan this code with the I-Collect 2.0, to change the settings of the reader

PLEASE SCAN THIS CODE TO SET COLLECTOR'S WORKING MODE

### 5.3 List of functions

Function	Description
Enter Setting	Enter the Setupmode (scan before pairing mode)
Exit Setup	Exit Setupmode (if you scanned enter setting, and want to leave setup mode)
Factory Reset	Deletes all configuration and data on device
Pairing Mode	Set the device to Pairing Mode , to connect with PC or Smartphone via Bluetooth (before scan enter setting)
Sleep for 5 sec.	Device goes into sleep mode after 5 sec.
Sleep for 10 sec.	Device goes into sleep mode after 10 sec.
Sleep for 30 sec.	Device goes into sleep mode after 30 sec.
Never Sleep	The device doesn't go into standby mode
Open Double-click Popup/HID	Open Double-click Popup/HID (only on IOS)
Close Double-click Popup/HID	Close Double-click Popup/HID (only on IOS)
Normal Mode	Activates normal Mode – Data is output directly via KEMU
Storage Mode	Activates Storage Mode - Data is stored on the device
Storage Data Upload	Upload the stored data via KEMU – You have to open up a word processing program and have this window activated, than you can scan the code and the stored data will be written via KEMU
Display Storage Memory	Displays how much barcodes and transponders you scanned with a counter.
Erase storage data	Erase the stored data , which you saved in storage mode

### 5.4 List of output formats

Working Mode	Description	Example
14443A UID-LSB	Standard output format	90249135
14443A UID-MSB	Output UID with Most significant byte	35912490
Mifare 1k/4k UID-LSB + Data	Output UID + Data in LSB (Standard format)	9024913590249135100804000178a5c53483b51d
Mifare 1k/4k UID-MSB + Data	Output UID + Data in MSB, which you selected on the software	3591249090249135100804000178a5c53483b51d
Mifare 1k/4k Data	Outputs only data, which you selected on the software in LSB	90249135100804000178a5c53483b51d
Ultralight Data	Outputs only data, which you selected on the software in LSB	047fac5f
15693 UID-LSB	Standard output format	29701B06013C16E0
15693 UID-MSB	Output UID with Most significant byte	E0163C01061B7029
15693 Data	Outputs only data, which you selected on the software in LSB	00000000

For further questions please contact : [support@idtronic.zendesk.com](mailto:support@idtronic.zendesk.com)

## 6 Downloads and support

		
Download : Software and Manuals:  <a href="http://download.idtronic.de/Handheld/I-Collect%202.0%20Manuals%20and%20Software.zip">http://download.idtronic.de/Handheld/I-Collect%202.0%20Manuals%20and%20Software.zip</a>	Software introduction :  <a href="https://www.youtube.com/watch?v=mgZAXDYMhGk&amp;feature=youtu.be">https://www.youtube.com/watch?v=mgZAXDYMhGk&amp;feature=youtu.be</a>	Support :  <a href="mailto:support@idtronic.zendesk.com">support@idtronic.zendesk.com</a>

## 7 Technical Parameters

Electrical Specification	
Power supply	+5 VDC ( $\pm 0.25V$ )
Battery capacity	1600 mAh
Charge current	480 mA
Operation frequency	13.56 MHz
Baudrate	115200 bit/s
Interface	USB or Bluetooth
Storage	131039 data 2048 byte
Reading range	Up to 4 cm( depends on antenna and cards)

Mechanical Specifications	
Dimension	50.4 × 24.8 × 118.4 mm (L × W × H)
Weight	98 g
Material	ABS

Environmental Conditions	
Operation temperature	-20°C ~ +55°C
Storage temperature	-40°C ~ +60°C
Humidity	Relative humidity 5% ~ 95%
IP standard	IP54
Anti-drop	Freely falling 3 times within 1.5meter, bearable

RFID Reading Standard	Tags
ISO14443A	MIFARE® Classic 1K /4K, MIFARE Ultralight®, MIFARE Ultralight® C, NTAG 21x, MIFARE DESFire, MIFARE Plus, and all other ISO14443A RFID tags
ISO15693	EM4135, EM4043, EM4x33, EM4x35, I-Code SLI / SLIX, M24LR16/64, TI Tag-it HF-I, SRF55Vxx (my-d vicinity)

Encoding	
Imaging sensor	960*640 COMS
1D barcode	EAN-8, EAN-13, EAN-13 2 add-on, EAN-13 5 add-on, ISSN, ISBN, UPC-A, UPC-E, Code 11, Code 39, Code 93, Code 128, Codabar, Industrial 2 of 5, Interleaved 2 of 5, MSI, GS1 DataBar (RSS14)
2D Barcode	PDF417, Micro QR, DataMatrix, QR code, Aztec
System compatible	Linux, Android, IOS, Windows XP/ 7/8/10, MAC
Scanning mode	Manual-press, Auto-scan and Continuous scan
Keyboard support	Multiple language, including minority language
Light Type	Wavelength = 675 nm $\pm$ 3 nm, High-light NIR LED
Recognition precision	Code 39, 6.6mil
Scanning speed	1500 times per second
Contrast	20 %
Second development	Not available
Angle range	Horizontal 72°, Vertical 82°, Rotate 360°

Wireless Parameters	
Wireless technology	Bluetooth
Transmit range	15 m
Transmit power	20 dBm
Receiver power	20 dBm