DIGITELLA INC.

UHF Mobile Terminal

SR7 User Manual

Content

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Chapter 1 Product intro

1.1 Intro

Digitella Inc. SR7 is a newly-developed wearable UHF reader that enables read distance of 9m. Connected with wristband by magnetic buckle, it features removable battery, performs data transmission via Type C USB, and enables user information interaction via Bluetooth coordinated with APP or SDK. And it also can be paired with Android/IOS device to expand RFID capability. This RFID reader can be suitable for warehousing, power inspection, asset management, retail, etc., which provides users with more flexibility to efficiently finish their tasks at hand.

1.2 Precaution before using battery

- Do not leave battery unused for long time, no matter it is in device or inventory. If battery has been used for 6 months already, it should be check for charging function or it should be disposed correctly.
- The lifespan of Li-ion battery is around 2 to 3 years, it can be circularly charged for 300 to 500 times. (One full battery charge period means completely charged and completely discharged.)
- When Li-ion battery is not in used, it will continue discharge slowly. Therefore, battery charging status should be checked frequently and take reference of the related battery charging information on the manuals.
- Observe and record the information of a new unused and non-fully charged battery. On the basis of operating time of new battery and compare with a battery that has been used for long time. According to product configuration and application program, the operating time of battery would be different.
- Check battery charging status at regular intervals.
- When battery operating time drops below about 80%, charging time will be increased remarkably.
- If a battery is stored or otherwise unused for an extended period, be sure to follow the storage instructions in this document. If you do not follow the instructions, and the battery has no charge remaining when you check it, consider it to be damaged. Do not attempt to recharge it or to use it. Replace it with a new battery.
- Store the battery at temperatures between 5 °C and 20 °C (41 °F and 68 °F).

1.3 Charger

The charger type is GME10D-050200FGu, output voltage/current is 5V DC/2A. The plug considered as disconnect device of adapter.

1.4 Notes

Note:
Using the incorrect type battery has danger of explosion.
Please dispose the used battery according to instructions.

Note:
Due to the used enclosure material, the product shall only be connected to a USB Interface of version 2.0 or higher. The connection to so called power USB is prohibited.

Note:
The adapter shall be installed near the equipment and shall be easily accessible.

Note:
The suitable temperature for the product and accessories is 0-10℃ to 50℃.

Note:
CAUTION RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

Chapter 2 Installation instructions

2.1 Appearance

SR7 appearances are showing as follows:

Indicating Lamps instruction

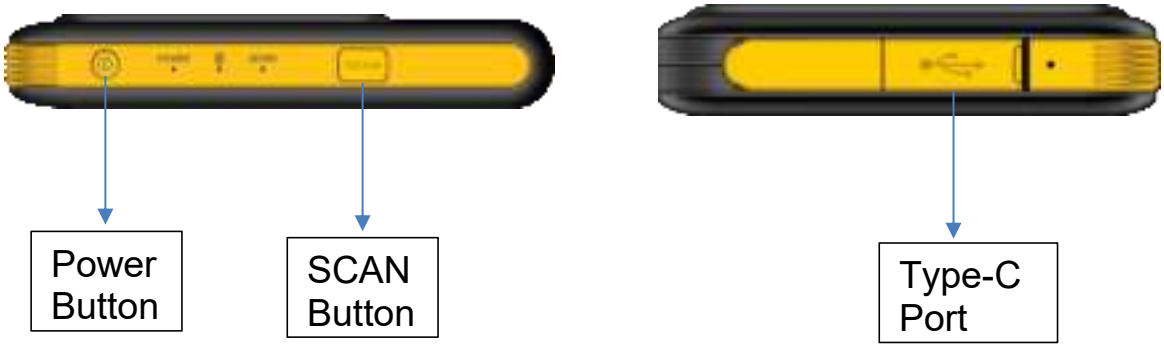
Lamps		Description
Indicating Lamps	Power	Red lamp lights up constantly (charging status) Green lamp lights up constantly (battery fully charged) Blue lamp lights up constantly (battery level higher than 20%) Blue lamp flashing (battery level lower than 20%)
	Bluetooth	Constant light up (Bluetooth connected)
	Work	Flash when read UHF tags

2.3 Battery charge

By using USB contact, the original adaptor should be used for charging the device. Make sure not to use other adaptors to charge the device.

2.4 Buttons and function area display

SR7 Sled reader has 1 power button and 1 Type-C port, 1 SCAN button.



Chapter 3 Demo Test

3.1 Install demo-uhf-bt (1.0.8)

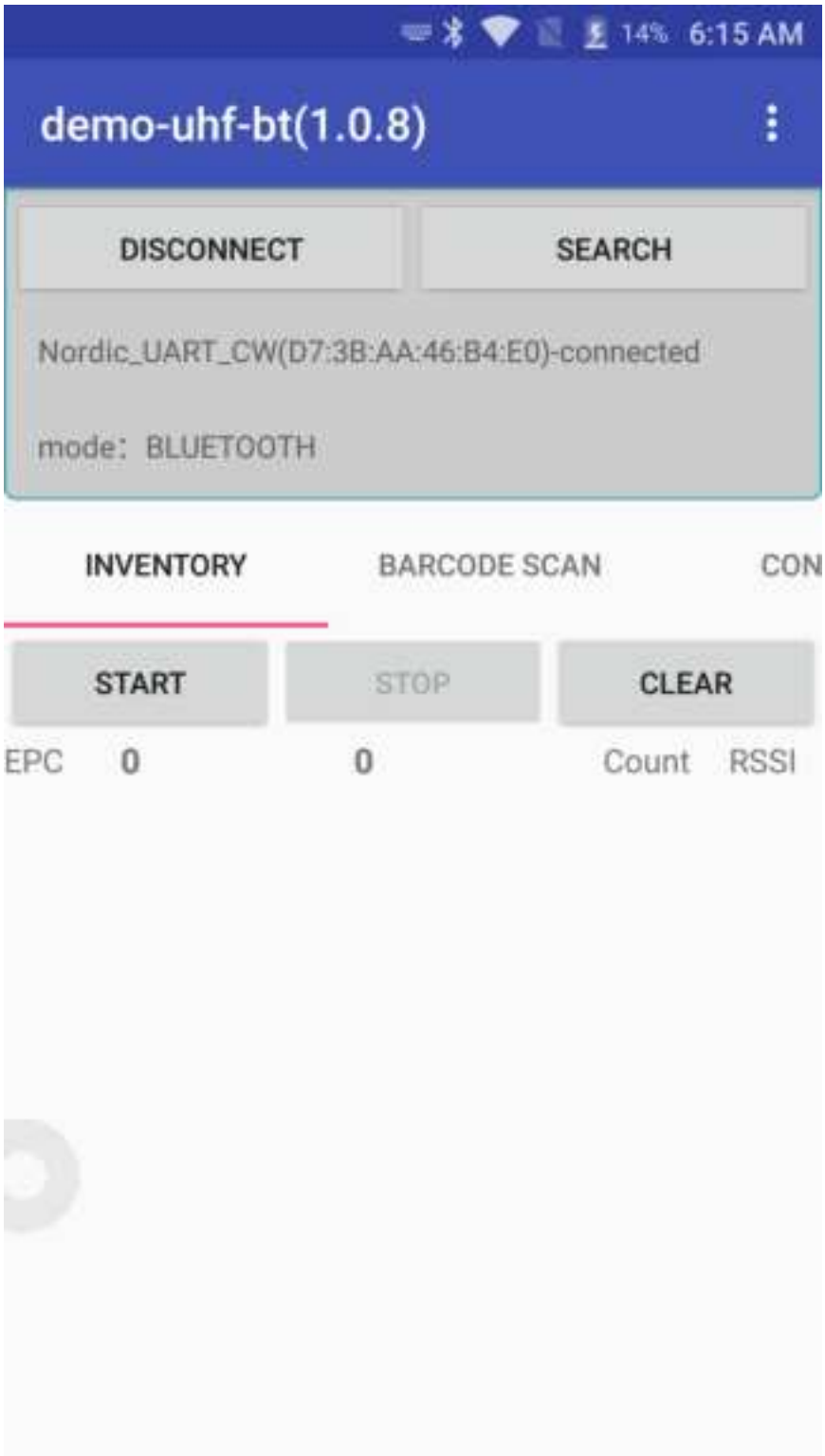
1. Copy demo-uhf-bt (1.0.8) into internal storage of smart phone or C7x device.
2. Click to install.
3. Click icon to open demo.

3.2 Pairing Device

1. Switch on Bluetooth function of smartphone or C7x device.
2. Power on R6.
3. Click BLUETOOTH in the demo.
4. Click SEARCH to search for Nordic_UART_CW.

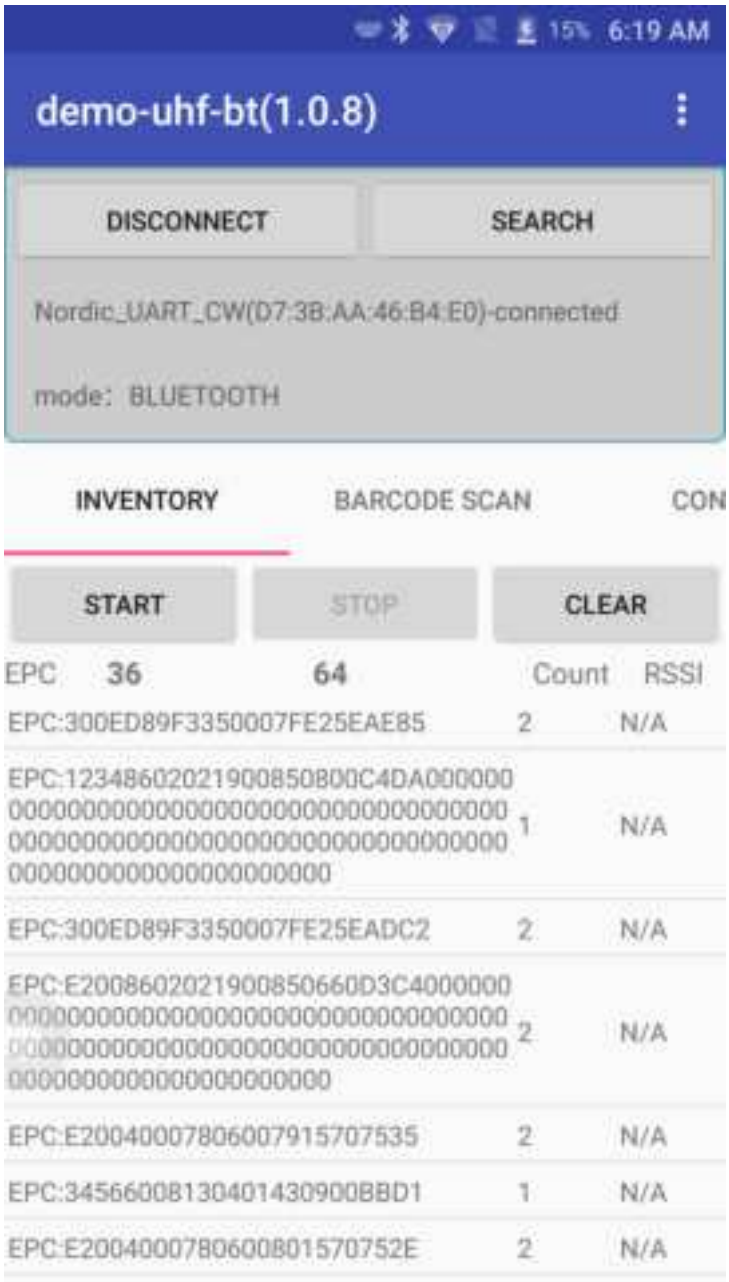
5. Click Nordic_UART_CW to connect.

6. After connecting successfully, user could click 3 dots on top right to check UHF version, battery percentage and UHF module temperature.



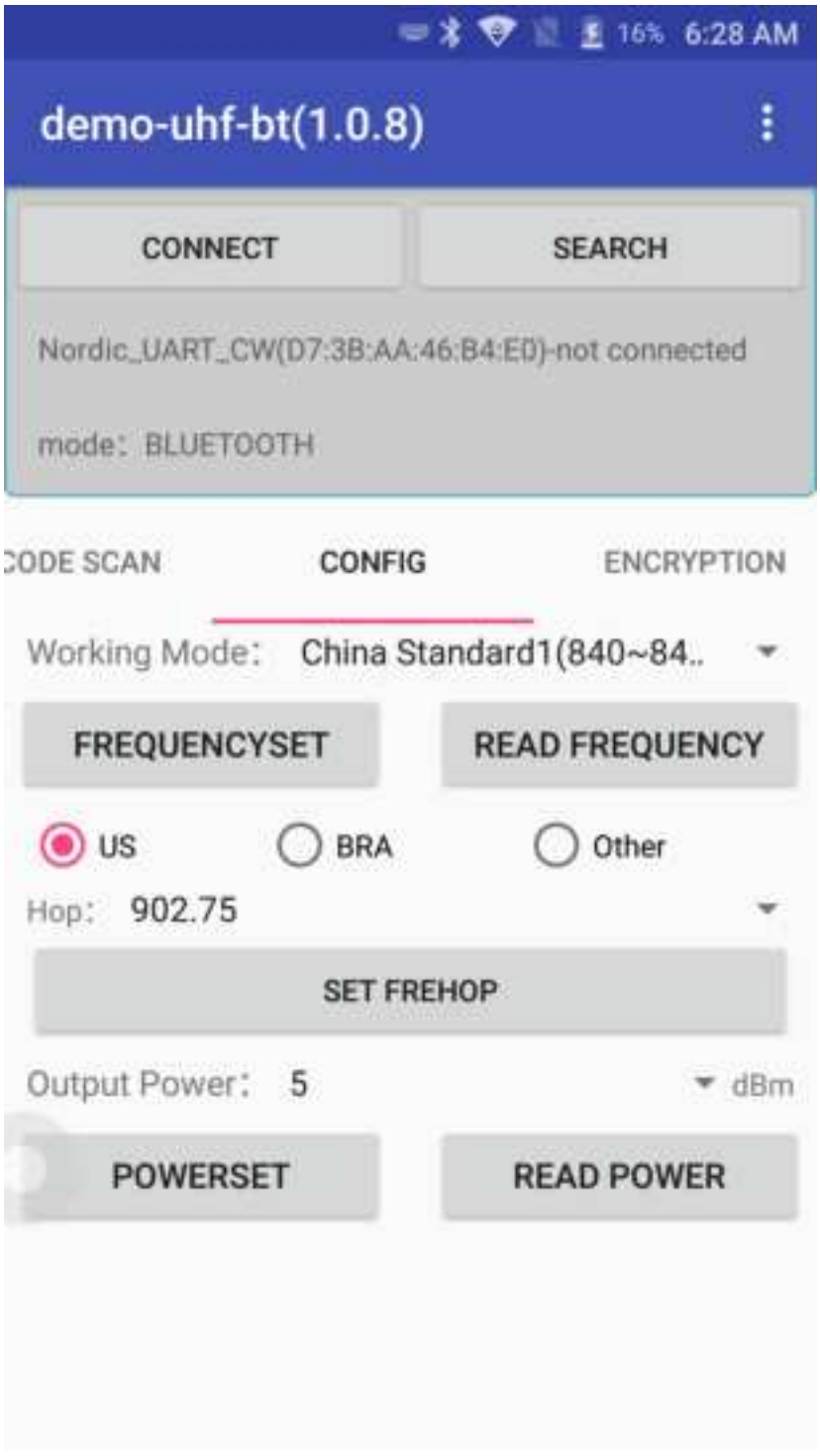
3.3 UHF Scan Function

1. Click START in demo or pull the trigger on R6, the UHF tags could be read.
2. Click STOP in demo to stop reading of UHF tags.
3. Click CLEAR to clean all EPC information.



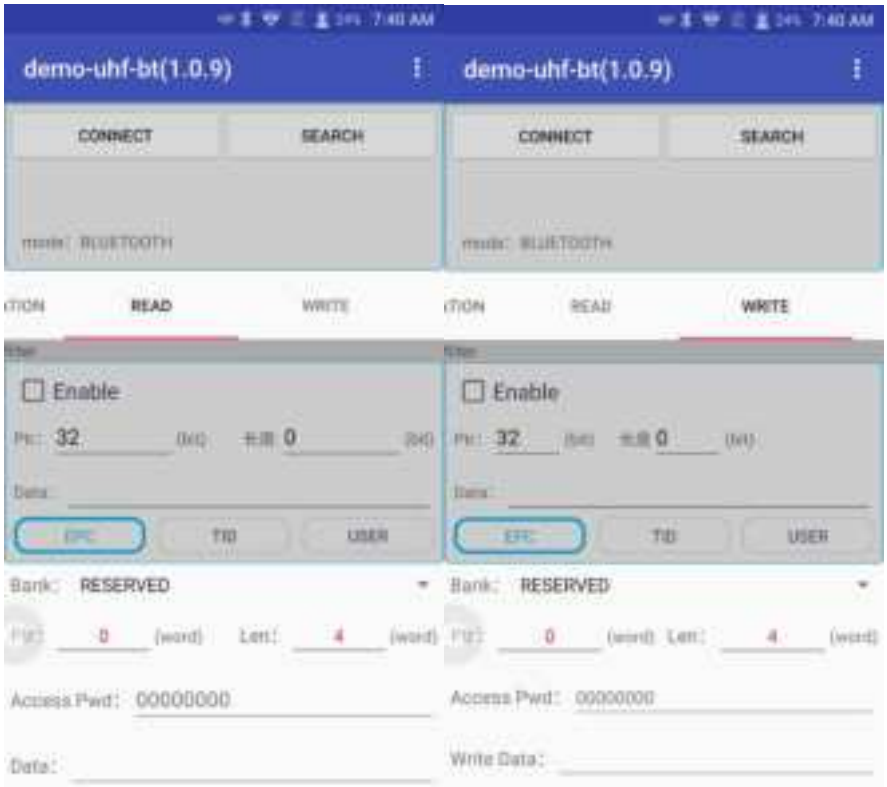
3.4 UHF Configuration

1. Click CONFIG in demo to adjust working mode and output power.



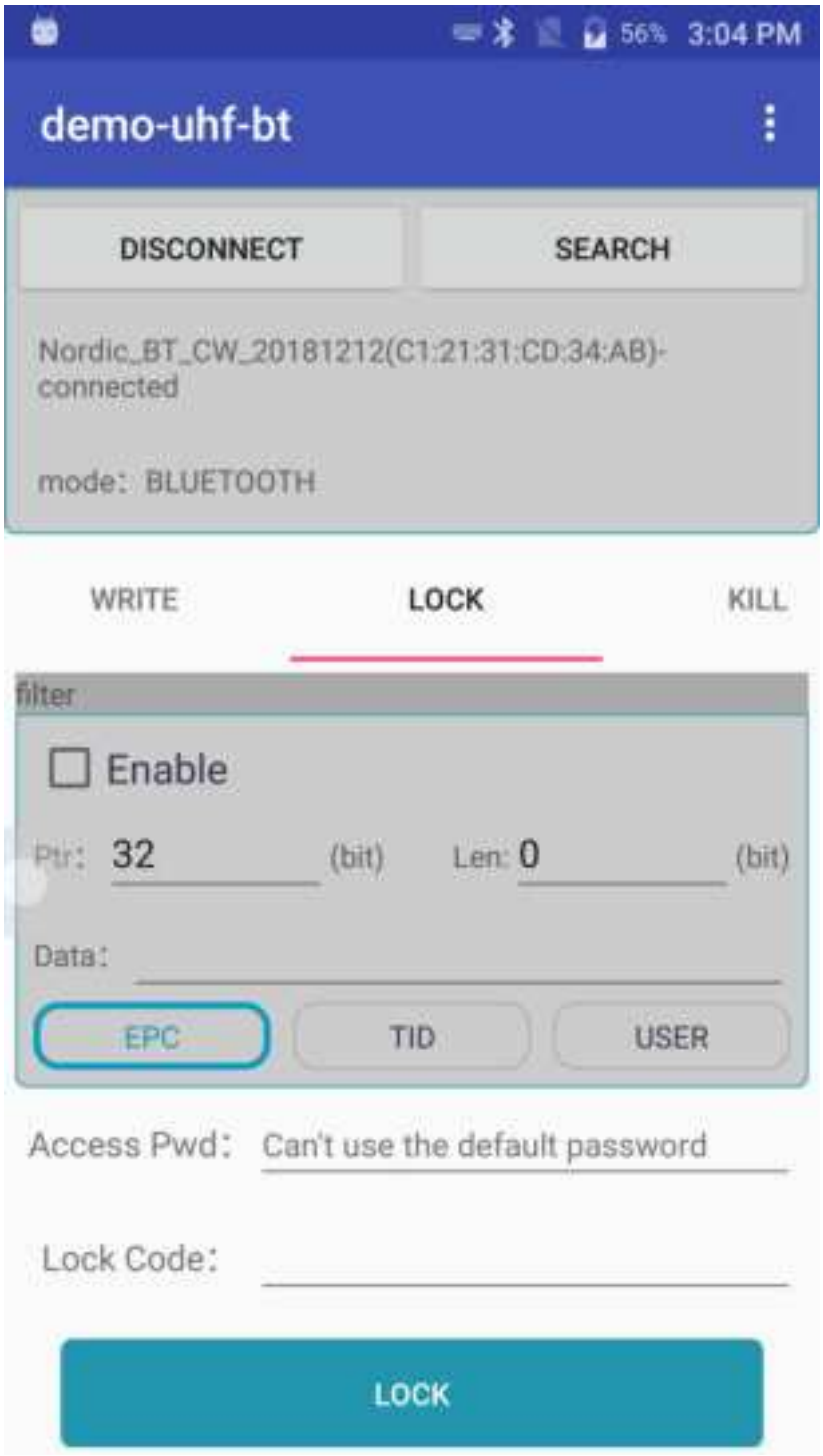
3.5 UHF Tag Reading and Writing

1. The storage of one tag has 4 zones: RESERVED, EPC, TID and USER. Normally, the default password is 00000000. And TID zone can only be read, other zones can be read and written.

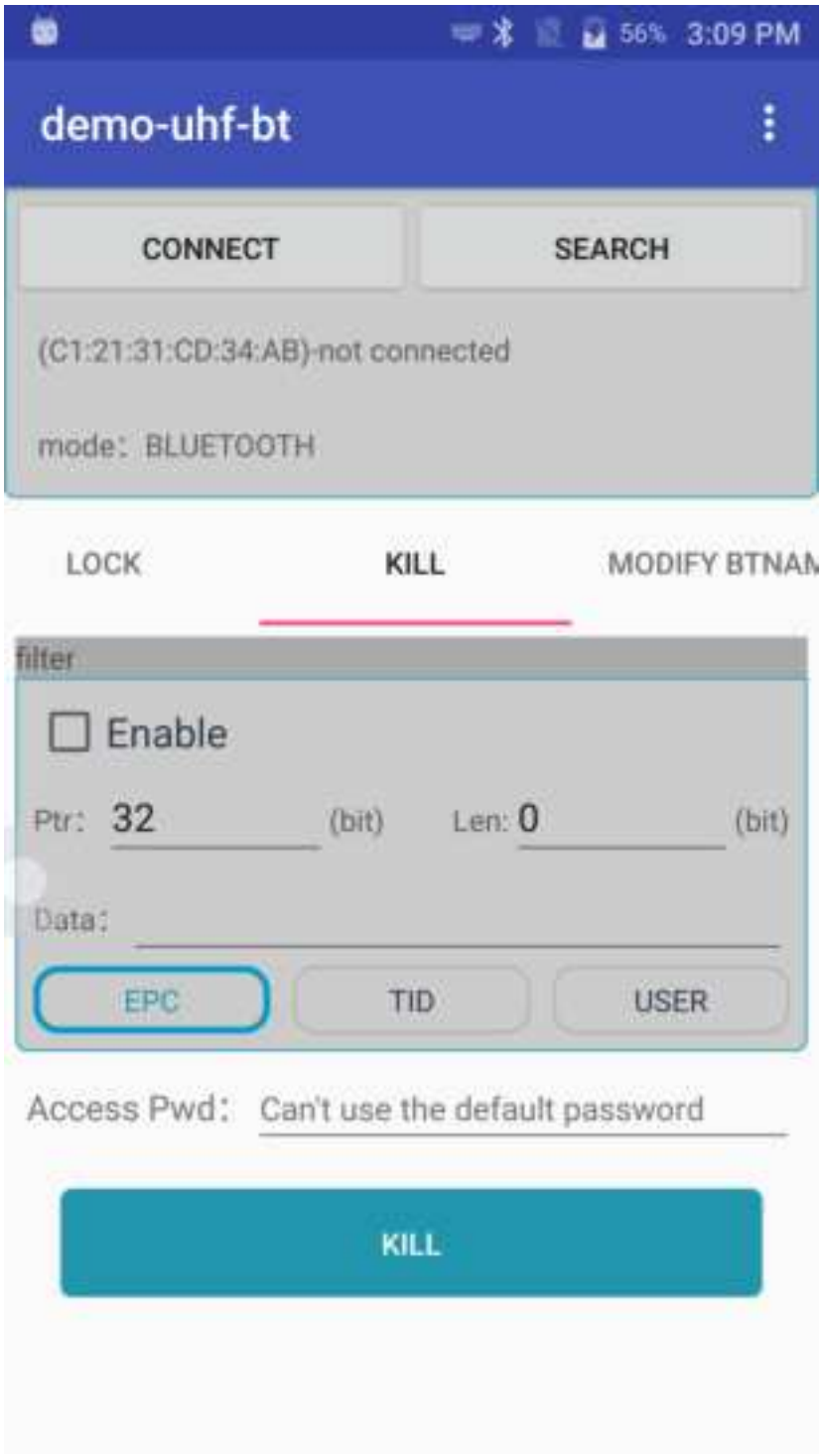


3.6 UHF Tag Lock and Kill

1. Lock Function:
   For example. User could try to lock down EPC zone.

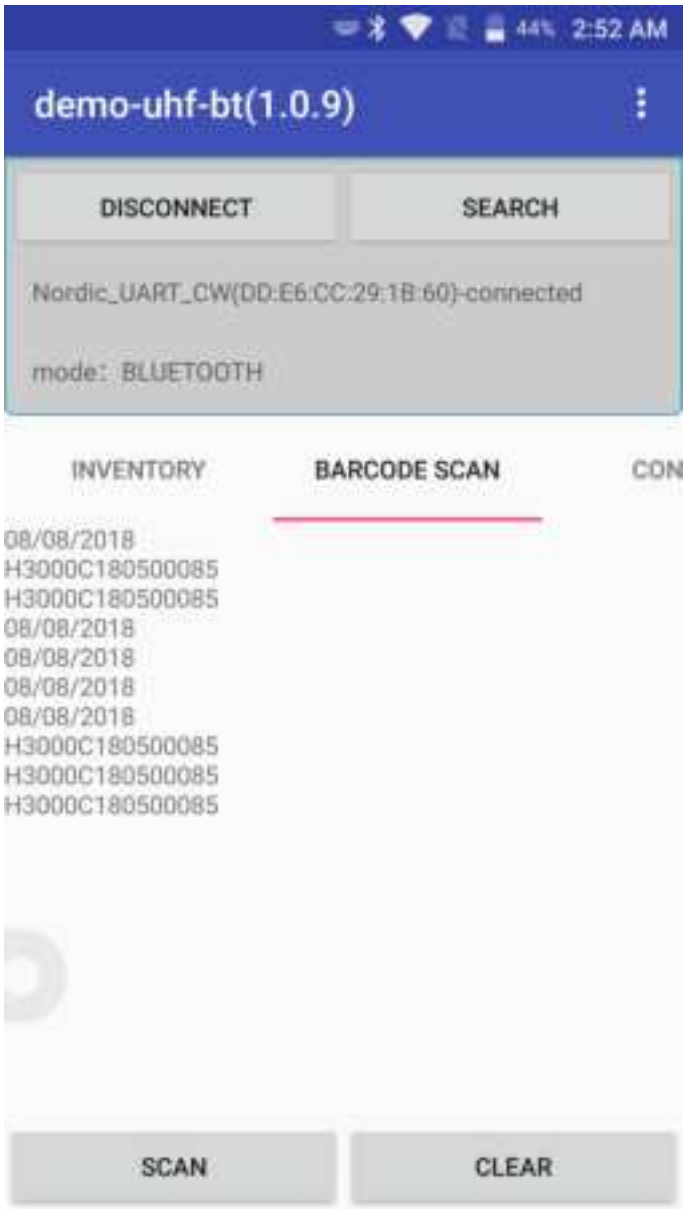


2. Kill Function:
   Kill function can be used to kill the tag permanently. Input the correct access password and click kill.



3.7 Barcode Scan Test

Select BARCODE SCAN in the demo and click SCAN button on the screen to scan barcodes.



Chapter 4 Device characteristic

Physical characteristics

Size	108 mm × 78 mm × 18 mm
Weight	200 g / 7.05 oz.
Color	Black
Appearance material	Plastic
Product material	Plastic
Battery specification	2000 mAh (removable)
Indicator LED	Power, Work, Bluetooth
Buzzer	NULL
Interfaces	Type-C

User environment

Operating temp.	-20℃ to 50℃
Storage Temp.	-40℃ to 70℃
Humidity	5%RH - 95%RH non condensing

UHF

Antenna	Circular Polarized Antenna (3dBic)
Frequency	920-925MHz/902-928MHz/865-868MHz
Protocol	EPC C1 GEN2 / ISO18000-6C
R/W range	> 9 m (open outdoors, Impinj MR6 tag)
Reading rate	>200tags/s * Ranges and rates depend on tags and environment

Declaration

The simplified EU declaration of conformity referred to in Article 10(9) shall be provided as follows: Hereby, Digitella Inc.. declares that the radio equipment type UHF Sled Reader is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following.

FCC Caution:

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.

Any 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.

The device has been evaluated to meet general RF exposure requirement. The device

can be used in portable exposure condition without restriction.

FCC ID: 2A8DXSR7