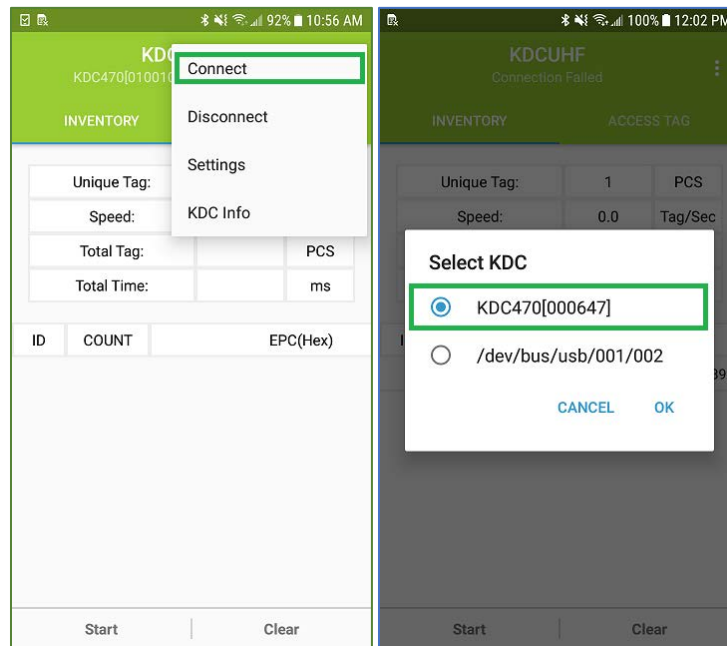


Install demo application

1. You can download the demo application from Google Play Store or Apple App Store and install it: KDCUHF

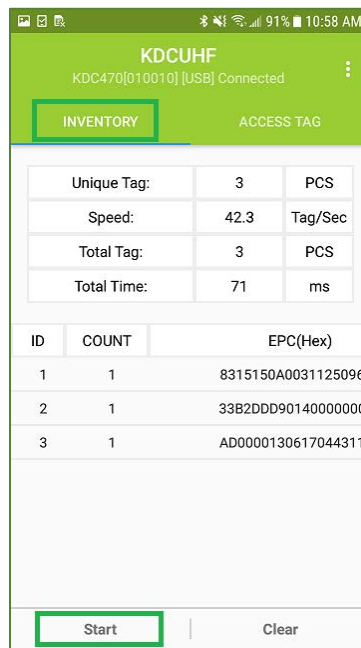
Connect KDC with a smart device

1. First, you should pair KDC with your host device through Bluetooth.
 - a. Send KDC to a pairing mode by scanning SPP & Pairing or MFi & Pairing barcode from the Quick Manual
 - b. Pair your smart device with KDC from the Bluetooth device list
 - c. See the [reference manual](#) for more detail pairing process.
2. Start KDCUHF you just installed then KDCUHF is trying to connect with KDC among paired KDC list.
3. If you want to connect to the specific KDC, please use the menu "Connect" from KDCUHF.



Read UHF data

1. Select "INVENTORY" and approach your UHF tags to read.
2. Then tap on "Start" button or press the physical SCAN button on the KDC.
3. You might hear multiple fast beeps while reading depending on the number of UHF tags nearby.
4. You can clear the current information with "Clear" button.



Unique Tag	The number of the unique tags which have been read.
Speed	The rate to identify tags, in pcs/s.
Total Tag	A piece of EPC No. The total amount which includes the data being repeatedly read.
Total Time	Total time it takes from start point, in ms.

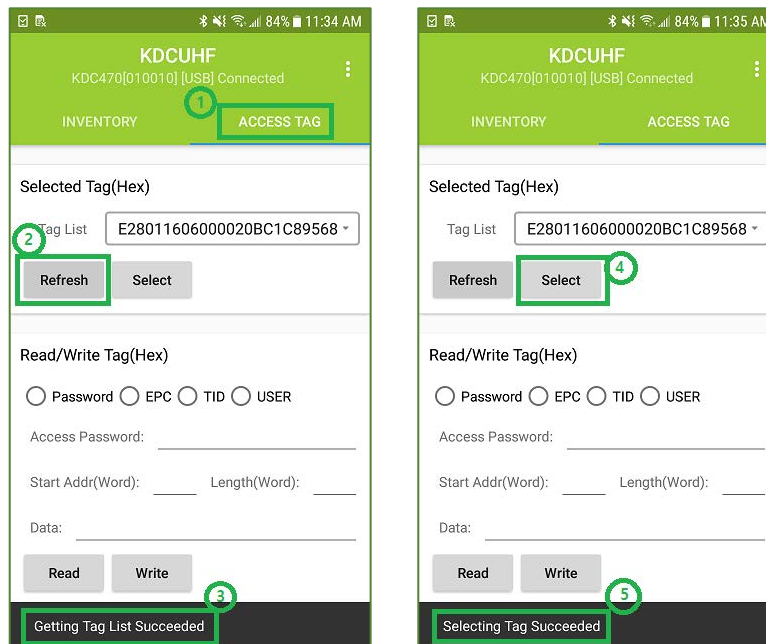
Meaning of the data in EPC column as below:

ID	ID for identifying unique tags
COUNT	The number of read each tag
EPC	EPC data of read tag
PC	PC data of read tag

Select UHF tag

Scan tags nearby and select the tag which you want to work with.

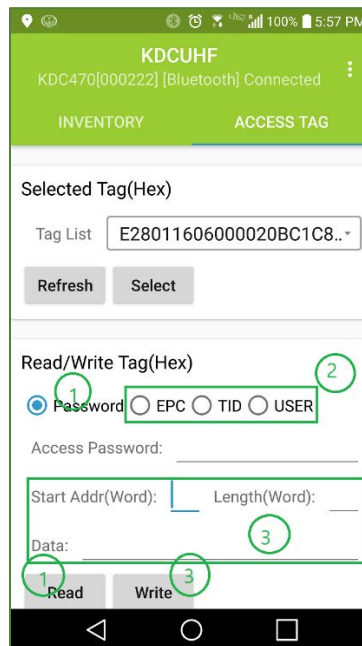
1. Select "ACCESS TAG" to set up
2. Approach UHF tag to write and tap on "Refresh" then you'll see the tag information on the "Tag List" field if successful.
3. Also, you'll see the toast message at the bottom saying, "Getting Tag List Succeeded".
4. Choose one UHF tag to do manual operation and tap on "Select".
5. If successful, you'll see the toast message at the bottom saying, "Selecting Tag Succeeded".



Read or Write UHF tag

Read Password and Read/Write data

1. Access password is required to read or write data. To get password, select "Password" and tap "Read" button.
 - KDCUHF uses the default access password (00 00 00 00) to get password. If the access password of the tag has been changed, the proper access password is required.
2. Once the password is read successfully, select the memory area to write (Password, EPC, or USER).
3. And then put the start address (Start Addr) and the length (Length), together with the data in hex to write (Data) and tap "Write" button.



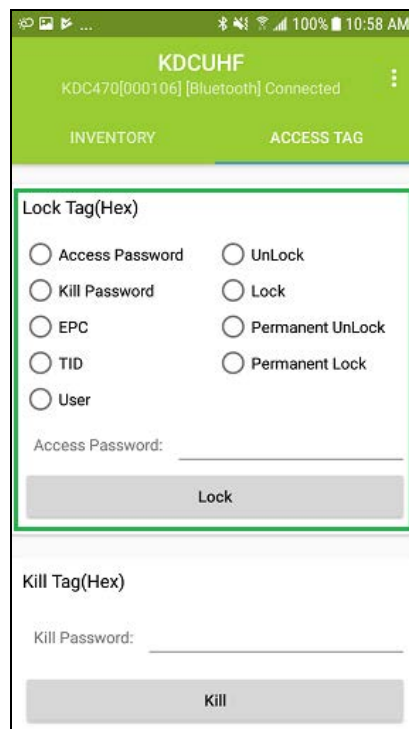
SDK API

1. The API to write a data to UHF tag is:
`public boolean WriteUHFTagMemory(byte[] pwd, UHFMemoryBank bank, int start, int length, byte[] data, UHFStatus status)`
2. You can check the guide document in the SDK package: KDC SDK Guide for Android.pdf

Lock UHF tag

Select UHF tag, Get access password and lock the tag.

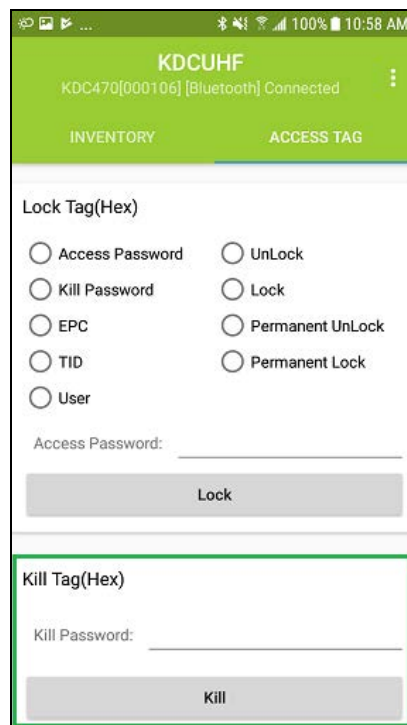
1. Select UHF tag which you want to lock through "Select Tag" menu. If the tag is selected already, skip it.
2. Access password is required to proceed locking the tag.
 - It might be invalid to lock the tag with the default password. Please modify the access password first before locking
3. Choose memory bank and action (unlock, lock, permanent...) and tap "Lock" button on "Lock Tag" menu.



Kill UHF tag

Select UHF tag, Get kill password and kill the tag.

1. Select UHF tag which you want to kill through "Select Tag" menu. If the tag is selected already, skip it.
2. Kill password is required to proceed killing the tag.
 - It is not possible to kill tags with default kill password. Please modify the kill password first.
3. Tap "Kill" button on "Kill Tag" menu.
 - Killed tags are no longer available.



UHF Setting

Change the connected KDC UHF configurations.

1. Enable UHF Power

Determine whether UHF Power is on or off.

2. UHF Power Level

Set UHF Power Level to the specific dBm.

3. Enable Smart Hopping

Enable or Disable "Smart Hopping" function.
It is depended on KDC which you are using.

4. UHF Read Tag Mode

Select UHF Read Tag Mode.

Single – Read only one tag.

Multiple – Read tags for a specific time.

Active – Read tags during "Scan" button is pressed

5. UHF Reading Timeout

Set Reading Timeout for Multiple Read Tag Mode.

6. Enable Duplicate Check

If enabled, duplicated tag data is not sent by KDC.

7. UHF Read Mode

Determine whether to scan Barcode or UHF when a Scan button of KDC is pressed or a scan command is received from the application.

8. UHF Data Type

Select UHF Data Type. Received data is composed with EPC and PC or EPC only.

9. Set UHF Region

Set UHF bandwidth (Frequency, Power, ...) to fit the region.
It is depended on KDC which you are using.

10. Stop Active Read

“Active Read” function stops after a certain period of time.

11. RFID beep count

Select read beep count of KDC.

12. Store RFID data

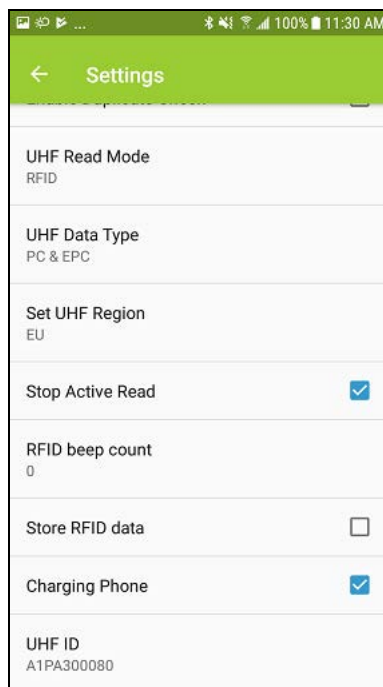
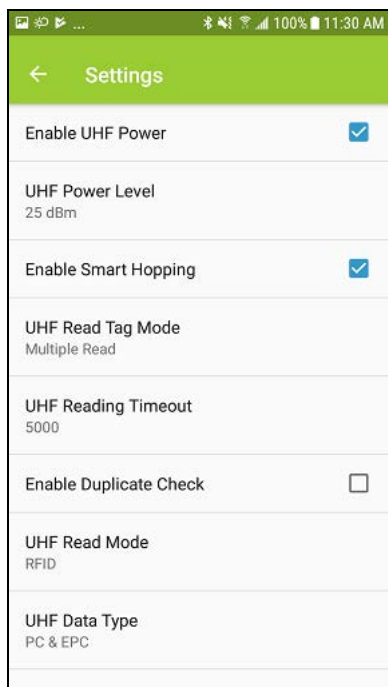
Determine whether read tag data is stored or not.

13. Charging Phone

Enable or Disable “Charging Phone” function when using 1.0W.

14. UHF ID

Show the UHF module ID



Application setting

Change KDC UHF configurations.

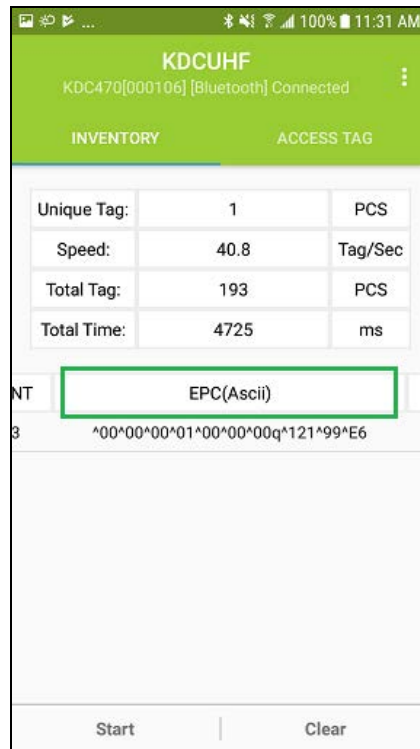
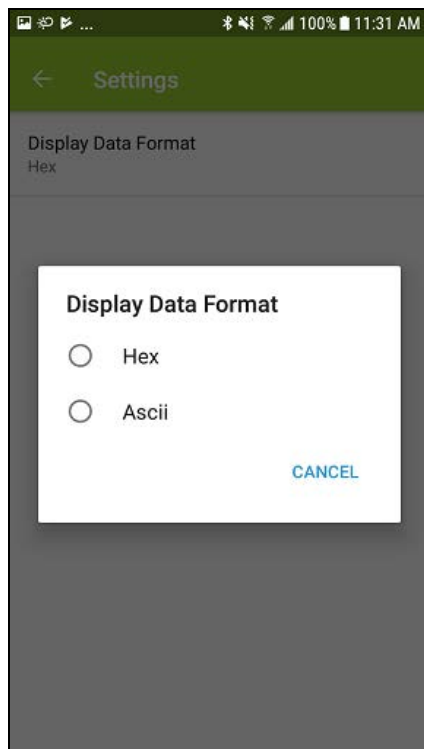
1. Display Data Format

- Select Hex string or ASCII as the default display data format.

When "Display Data Format" is ASCII,

"^" is used control character like "\" so you should write "^ ^", if you want to input "^" in ASCII mode.

Characters that can't be displayed are indicated by "^" and a two digit hex string. For example, 0x00 0xFF will be displayed ^00^FF.



KDC Information

Display the connected KDC information.

- Serial Number, Firmware Version, etc.

