Smart bike usual manual

1. All state

1) New bike mode

   a. CPU sleep

   b. Press any button to wake up into Login in mode

2) Login in mode(BLE device name: Smart_Bike199999)

   a. With advertising(advertising interval: 100ms)

   b. Connect and go to on station when disconnect(Bonded)

   c. No connect and time out in 30s(back to new bike mode)
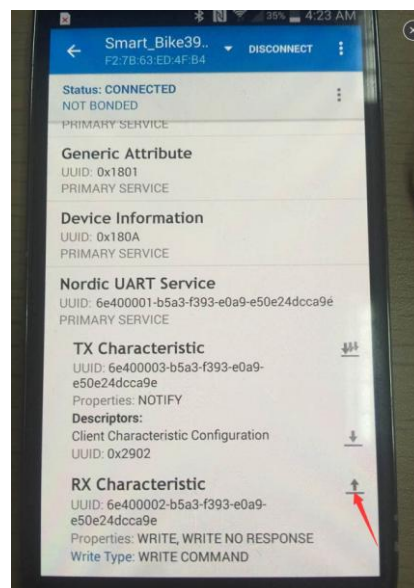
3) On station mode(BLE device name: Smart_Bike2999999)

   a. With advertising(advertising interval: 5s)

   b. Press password to go to Loan mode

c. Option 1: use password to get a bike.

   a) Password format: Password+ 'OK'

   b) Password length: 1~13

d. Option 2: use NFC card to get a bike. Press 'OK' and use a NFC card close the antenna.

4) Loan mode(BLE device name: Smart_Bike399999)

a. With advertising(advertising interval: 100ms)

b. No connect and time out in 30s(back to On station mode)

c. Connected

   a) Check key ok: Write '0' to RX Characteristic, it will unlock the bike and go to Out station mode when disconnect.

   b) Key wrong: Disconnect to go back to On station mode.

5) Out station mode

   a. Option 1: Press password to unlock the bike.

   b. Option 2: Press 'OK' button to unlock the bike with read a NFC card.

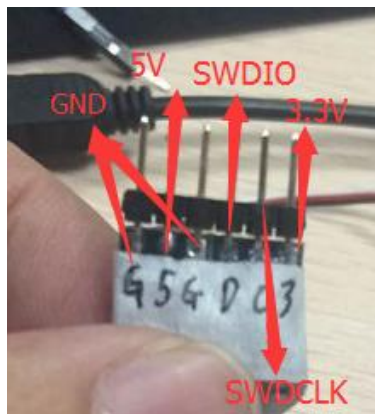   c. Press 888+'ok' to go to return mode.

6) Return mode(Smart_Bike599999)

   a. With advertising(advertising interval: 100ms)

   b. No connect and time out in 30s(back to Out station mode)

   c. Connected

      a) Check key ok: Write '00' to RX Characteristic, it will unlock the bike and go to Out station mode when disconnect.

      b) Key wrong: Disconnect to go back to Out station mode.

2. Quick start

   a. Press 888+'ok' to go to Back mode because the sample is in Out station mode now.

   b. Connect "Smart_Bike599999" and write "00" to RX Characteristic, it will unlock the bike and go to on station mode when disconnect.

   c. Disconnect to go to On station mode and choose how to unlock the bike (NFC or Password).

      a) Option 1: press password+ 'OK'.

      b) Option 2: press 'OK' and put the NFC card close the antenna.

d. Into Loan mode and connect to "Smart_Bike399999" .

e. Write '0' to RX Characteristic, it will unlock the bike and go to Out station mode when disconnect.

f. Disconnect to go to out station mode

g. Press your password before or Press 'OK' button to read NFC to unlock your bike.

3. Debug wiring

4. BLE test app

IOS: lightBlue

Android: nRF Master control Panel

5. BLE service: Nordic UART Service

TX Characteristic(notify): receive BLE device data from notify.

RX Characteristic(write): send data to BLE device with write this characteristic.