

# Rabboni Python SDK

## Prerequisite

環境 Python 版本 3.7 以上

---

## Installation

```
pip install rabboni-multi-python-sdk
```

or

```
python3 setup.py install
```

---

## Usage

### Rabboni 建立連線

```
rab = Rabboni()
asyncio.run(rab.connect())
```

### 讀取 Rabboni 電力

```
async def fetch_battery_level(rab: Rabboni):
    await asyncio.sleep(15)
    await rab.get_battery_level()

rab = Rabboni(mode='BLE', name='TEST_RAB')
tasks = [
    asyncio.ensure_future(rab.connect()),
    asyncio.ensure_future(fetch_battery_level(rab))
]
loop = asyncio.get_event_loop()
loop.run_until_complete(asyncio.wait(tasks))
```

## Example

- Rabboni 建立連線

```
import asyncio

from rabboni_multi_python_sdk import Rabboni

rab = Rabboni()

try:
    asyncio.run(rab.scan())
    asyncio.run(rab.connect(mac_address='D1:35:2D:30:19:35'))
except KeyboardInterrupt:
    print('Bye~~')
```

- 讀取 Rabboni 電力

```
import asyncio

from rabboni_multi_python_sdk import Rabboni

async def fetch_battery_level(rab: Rabboni):
    await asyncio.sleep(15)
    await rab.get_battery_level()

def run():
    rab = Rabboni(mode='BLE', name='TEST_RAB')
    tasks = [
        asyncio.ensure_future(rab.connect()),
        asyncio.ensure_future(fetch_battery_level(rab))
    ]
    loop = asyncio.get_event_loop()
    loop.run_until_complete(asyncio.wait(tasks))

if __name__ == "__main__":
    try:
        run()
    except KeyboardInterrupt:
        print('Bye~~')
```

- Run example

```
> python .\examples\example.py
```

```
Scan BLE Devices: [66:A5:83:23:1B:A7: Apple, Inc. (b'\x10\x06\x00\x1ej\x1a\xda\xdb'), 74:68:F8:74:EB:4
Discover BLE Devices: [E5:9F:B8:36:17:9A: RABBONI, 79:78:A4:55:88:12: Apple, Inc. (b'\x07\x19\x01\x0f
Connecting BleakClientDotNet (E5:9F:B8:36:17:9A)
Connected: True
Starting notification.
{'name': 'Rabboni', 'acc': [0.008, -0.02, 0.994], 'gyr': [-0.006, 0.011, 0.007], 'trigger': False, 'co
{'name': 'Rabboni', 'acc': [0.009, -0.02, 0.995], 'gyr': [-0.005, 0.01, 0.006], 'trigger': False, 'co
{'name': 'Rabboni', 'acc': [0.013, -0.021, 0.993], 'gyr': [-0.005, 0.011, 0.007], 'trigger': False, 'c
{'name': 'Rabboni', 'acc': [0.006, -0.023, 0.996], 'gyr': [-0.005, 0.011, 0.007], 'trigger': False, 'c
{'name': 'Rabboni', 'acc': [0.005, -0.02, 0.991], 'gyr': [-0.004, 0.011, 0.005], 'trigger': False, 'co
{'name': 'Rabboni', 'acc': [0.007, -0.021, 0.991], 'gyr': [-0.003, 0.011, 0.007], 'trigger': False, 'c
{'name': 'Rabboni', 'acc': [0.007, -0.019, 0.993], 'gyr': [-0.006, 0.013, 0.006], 'trigger': False, 'c
{'name': 'Rabboni', 'acc': [0.008, -0.022, 0.994], 'gyr': [-0.004, 0.012, 0.007], 'trigger': False, 'c
{'name': 'Rabboni', 'acc': [0.008, -0.018, 0.993], 'gyr': [-0.004, 0.013, 0.006], 'trigger': False, 'c
{'name': 'Rabboni', 'acc': [0.009, -0.023, 0.992], 'gyr': [-0.005, 0.012, 0.007], 'trigger': False, 'c
{'name': 'Rabboni', 'acc': [0.007, -0.019, 0.994], 'gyr': [-0.004, 0.013, 0.005], 'trigger': False, 'c
{'name': 'Rabboni', 'acc': [0.007, -0.022, 0.994], 'gyr': [-0.005, 0.011, 0.005], 'trigger': False, 'c
Client BleakClientDotNet (E5:9F:B8:36:17:9A) got disconnected!
System.ObjectDisposedException: The object has been closed. (Exception from HRESULT: 0x80000013)
Shutting down Rabboni notification.
```



# rabboni\_multi\_python\_sdk

## Rabboni Objects

```
class Rabboni()
```

Rabboni 類別

### Arguments:

- `mode` *str*- 連線模式
- `name` *str*- 裝置名稱

### `__init__`

```
| __init__(mode='BLE', name='Rabboni')
```

The constructor

### scan

```
| async scan()
```

掃描周邊 BLE 裝置

### connect

```
| async connect(mac_address: str = None, callback=None)
```

建立 Rabboni 裝置連線

### disconnect

```
| async disconnect()
```

Rabboni 裝置斷開連線

### get\_battery\_level

```
| async get_battery_level()
```

獲取 Rabboni 裝置電池狀態

## reset\_count

```
| async reset_count()
```

重置 Rabboni 裝置紀錄數

## rabboni\_multi\_python\_sdk.command

## rabboni\_multi\_python\_sdk.constants

**ACC\_FSR\_CHAR** *Default value is ACC\_SCALE\_2G*

```
ACC_SCALE_2G: 0x00  
ACC_SCALE_4G: 0x01  
ACC_SCALE_8G: 0x02  
ACC_SCALE_16G: 0x03
```

## rabboni\_multi\_python\_sdk.errors