



20241015



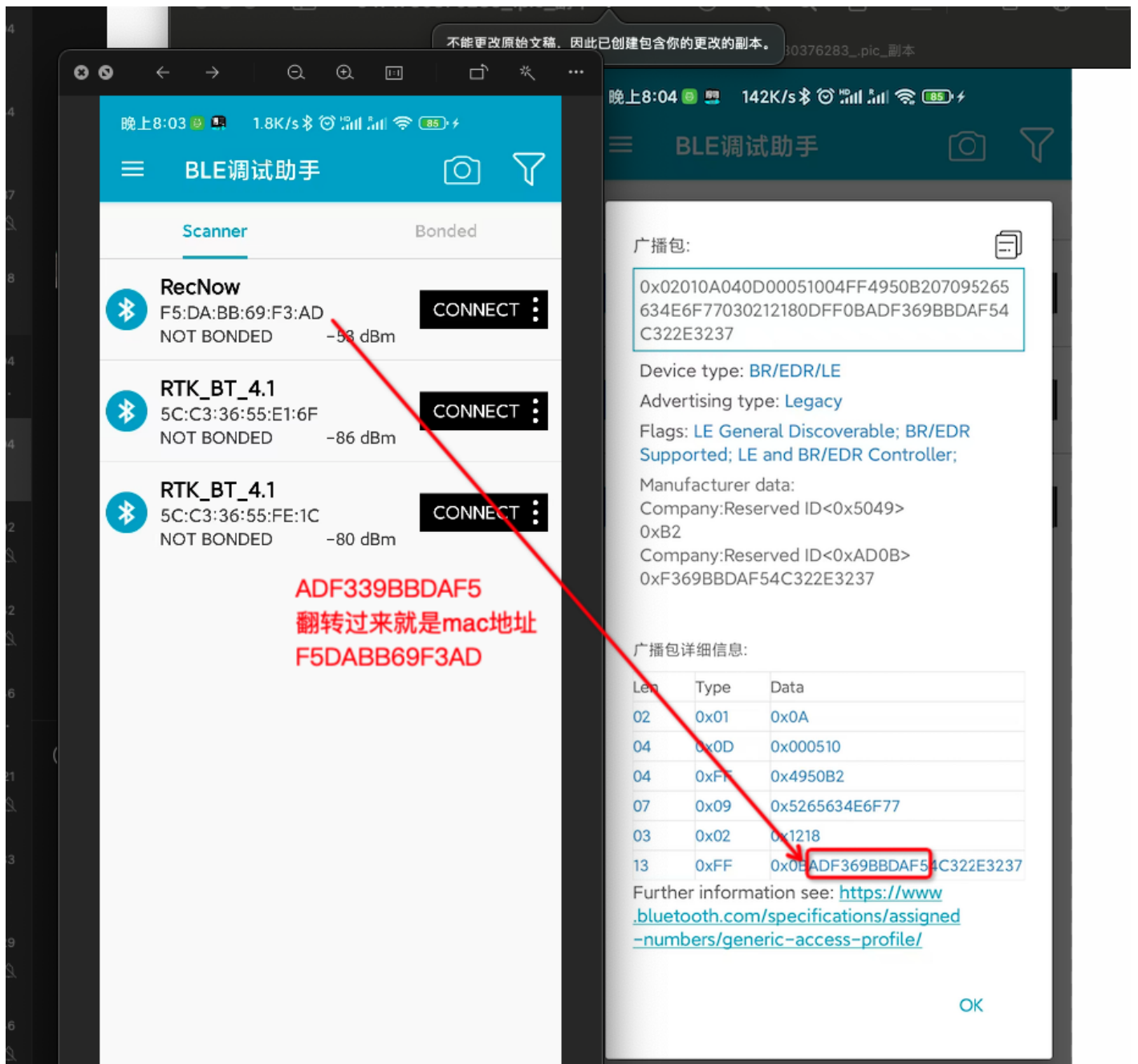
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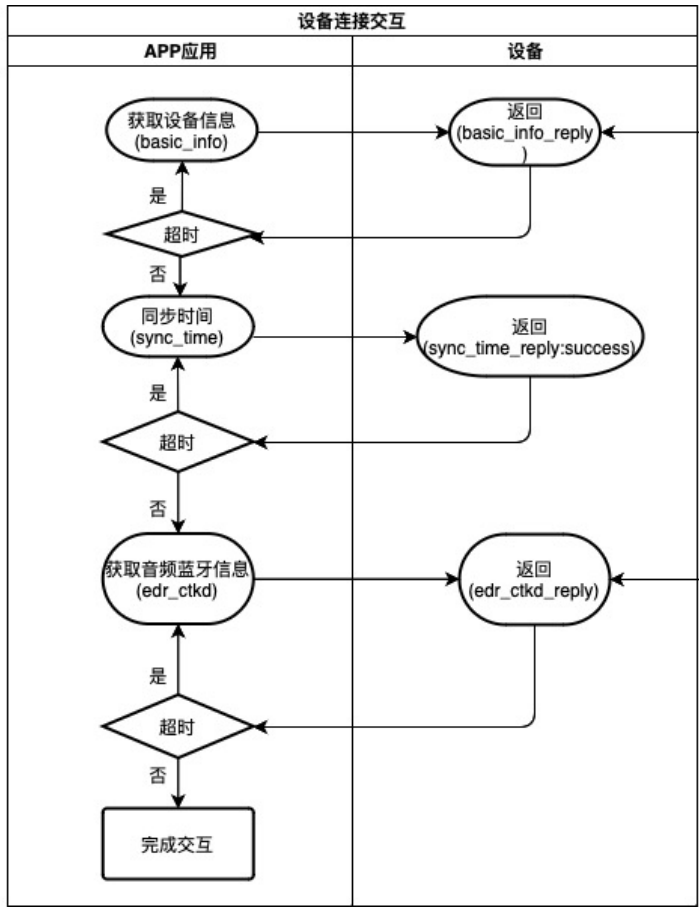
□□□□□□□□□□ MAC□□□□ □□□□□□□□ BLE□□□□□□□□□□



0x0BADF369BBDAF54C322E3237

- 0x0B: :11
- ADF369BBDAF5: Mac
- 4C:
- 322E3237: 2.27

APP



超时重发一般重发一次

"sw_version": 软件版本号 (string)
"battery": 电量 (string)
"rec_led": 录音灯 (string)
"rec_mode": 录音模式 自动/手动 (string)
"language": 语言 (string)
"sd_total": 总数目 (int)
"sd_capacity": sd卡剩余容量 (int) (MB)
"usb_otg": usb状态
"total_capacity": sd卡总容量 (int) (不含文件系统的容量)(MB)

"edr_name": 音频蓝牙名称
"mac_addr": mac地址
"connect_state": 音频蓝牙连接状态

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APP端

蓝牙设备端

Step1:发送获取设备信息指令

```
{
  "method": "get",
  "id": "10002",
  "ver": "2.27",
  "data": "basic_info"
}
```

设备应答:

```
{
  "method": "basic_info_reply",
  "id": "10002",
  "ver": "V2.27",
  "data": [{"sw_version": "V2.27"}, {"battery": "80"},
  {"rec_led": "open"},
  {"rec_mode": "rec_head"},
  {"language": "EN"},
  {"sd_total": 9},
  {"sd_capacity": 981712},
  {"usb_otg": "open"},
  {"total_capacity": 1024}],
  "error": []
}
```

Step2:发送同步时间指令

```
{
  "method": "set",
  "id": "10003",
  "ver": "2.27",
  "data": {
    "sync_time": "20241030090047"
  }
}
```

设备应答:

```
{
  "method": "sync_time_reply",
  "id": "10003",
  "ver": "V2.27",
  "data": [{"sync_time": "success"}], "error": []
}
```

Step3: 获取BT信息

```
{
  "method": "get",
  "id": "10004",
  "ver": "2.27",
  "data": "edr_ctkd"
}
```

设备应答:

```
{
  "method": "edr_ctkd_reply",
  "id": "10004",
  "ver": "V2.27",
  "data": [{"edr_name": "RecNow8d8e8f"},
  {"mac_addr": "8a8b8c8d8e8f"},
  {"connect_state": "connected"}],
  "error": []
}
```



UUID

4.1 数据写入

- APP数据写入
uuid: 00010203-0405-0607-0809-0A0B0C0D2B16
操作 WRITE|WRITE_WITHOUT_RESPONSE
服务 service:00010203-0405-0607-0809-0A0B0C0D1911
- 设备数据 APP数据
uudi 00010203-0405-0607-0809-0A0B0C0D2B17
操作 READ|NOTIFY
服务 service:00010203-0405-0607-0809-0A0B0C0D1911

4.2 数据读取

- 设备数据 APP数据
uuid:00010203-0405-0607-0809-0A0B0C0D2B18
操作 READ|NOTIFY
服务 service 00010203-0405-0607-0809-0A0B0C0D1913

4.3 数据删除

- 设备数据 APP数据
uuid: 00010203-0405-0607-0809-0A0B0C0D2B22
操作 READ|NOTIFY
服务 service 00010203-0405-0607-0809-0a0b0c0d1913

5 数据管理

数据管理

数据管理

sd

数据管理

数据管理

数据管理

数据管理

数据管理

数据管理

get数据

set数据

数据管理

excel数据

5.1 get数据

app数据

```
{
  "method": "get",
  "id": "123",
  "ver": "1.0",
  "data": "battery"
}
```

- method: "get" [000000]
- id: [000000] id [000000000000] id [00000]
- ver: [0000000]
- data [000] key [] battery [0000]

[00000000]

```
{
  "method": "battery_reply",
  "id": "123",
  "ver": "1.0",
  "data": [
    { "battery": "100" }
  ],
  "error": []
}
```

- method: xxxx_reply, xxxx [0000] key []
- id: [000000] id [000000000000] id [00000]
- ver: [0000000]
- data [000] key [] value [] battery [0000000000000000]
- error [] [0000000]

5.2 set [00000]

app [000000]

```
{
  "method": "set",
  "id": "456",
  "ver": "1.0",
  "data": { "mic_status": "open" }
}
```

- method: "set"xxxxxxxx
- id:xxxxxx idxxxxxxxxxxxxxx idxxxx
- ver: xxxxxxx
- dataxxx key mic_statusxxxxxxxx "open"xx "close"xx

xxxxxxxx

```
{
  "method": "mic_status_reply",
  "id": "456",
  "ver": "1.0",
  "data": [
    {"mic_status": "success"}
  ],
  "error": []
}
```

- method: xxxx_reply,xxxxxxxx key
- id:xxxxxx idxxxxxxxxxxxxxx idxxxx
- ver: xxxxxxx
- dataxxx key mic_statusxxxxxxxx "success"xxxxxxxx " " " " " "
- error xxxxxxx

5.3

name	key	value	type	get	set
xxxx	battery	xxxxxxxx x	string	✓	x
xxxxxx	sync_time	xxxxx YYYYMMDDHHMM Mxxxxxx "20230801113301"	string	x	✓
xxxxxx	cur_time	xxxxxxxx xxxxx "20230801113301"	string	✓	x
xxxxxx x	mic_status	"open"xx ,"close"xx	string	✓	✓
xx ibeaconxx	cur_ibeacon_id	xx "6" xxxx 6	string	✓	x

name	key	value	type	get	set
固件版本	sw_version	固件 "1.0" 版本号 1.0	string	✓	x
录音状态	rec_status	固件 "rec_start" 开始录音 "rec_start" 录音中	string	✓	x
录音模式	rec_mode	固件 "rec_auto" 录音模式 "rec_head" 录音头	string	✓	✓
SD卡容量	sd_capacity	固件 "490" 容量 490MB	string	✓	x
录音灯 开关	rec_led	"open"打开 ,"close"关闭	string	✓	✓
固件	cur_rec_state	固件状态 :"live" 固件 : :"phone_in" :"phone_out" 固件 "bt_music" 固件 null	string	✓	x
固件更新	auto_update	"open"打开 ,"close"关闭	string	✓	✓
usb接口	usb_otg_status	"open"打开 ,"close"关闭	string	✓	✓

6. 固件

固件更新

固件 APP

6.1 固件更新

app

```
{
  "method": "get",
```



```
"id": "123",
"ver": "1.0",
"data":"basic_info"
}
```

- method: "get"
- id: id id
- ver:
- data "basic_info"

```
{
  "method": "basic_info_reply",
  "id": "123",
  "ver": "1.0",
  "data":
  [
    {"sw_version":"1.0"},
    {"battery":"100"},
    {"rec_led":"open"},
    {"rec_mode":"rec_auto"},
    {"language":"EN"},
    {"sd_total":65},
    {"sd_capacity":"490"}
    {"usb_otg":"open"}
    {"total_capacity":"512"}
  ]
  "error":[]
}
```

- method "basic_info_reply"
- id: id id
- ver:
- error
- data:
 - sw_version:
 - battery:
 - rec_led: led
 - rec_mode:
 - language:
 - sd_total: sd

- sd_capacity: 1024 MB
- usb_otg: 1024 usb 1024 sd 1024
- total_capacity: 1024 MB

6.2 1024 SD 1024

1024 1024

app 1024

1024 1024

```
{
  "method": "get",
  "id": "123",
  "ver": "1.0",
  "data":{"sd_list":1}
}
```

- method: 1024 "get"
- id:1024 id 1024 id 1024
- ver: 1024
- data1024 {"sd_list":1} 1024 1024

1024 1024

```
{
  "method":"sd_list_reply",
  "id":"123",
  "ver":"1.0",
  "data":[
    {"total":56}

    {"id":1,"size":512,"name":"320030003200330030003900300031003000390035003000310032002E006D0070003300"},

    {"id":2,"size":512,"name":"320030003200330030003900300031003000390035003000310033002E006D0070003300"},

    {"id":3,"size":512,"name":"320030003200330030003900300031003000390035003000310034002E006D0070003300"},
  ]
}
```

```
{
  "id": 4,
  "size": 512,
  "name": "320030003200330030003900300031003000390035003000310035002E006D0070003300",
},

{
  "id": 5,
  "size": 512,
  "name": "320030003200330030003900300031003000390035003000310036002E006D0070003300",
},

{
  "id": 6,
  "size": 512,
  "name": "320030003200330030003900300031003000390035003000310037002E006D0070003300",
},

{
  "id": 7,
  "size": 512,
  "name": "320030003200330030003900300031003000390035003000310038002E006D0070003300",
},

{
  "id": 8,
  "size": 512,
  "name": "320030003200330030003900300031003000390035003000310039002E006D0070003300",
},

{
  "id": 9,
  "size": 512,
  "name": "320030003200330030003900300031003000390035003000320030002E006D0070003300",
},

{
  "id": 10,
  "size": 512,
  "name": "320030003200330030003900300031003000390035003000320031002E006D0070003300",
},
  "error": []
}
```

10 (total/10+1) 0

- method "sd_list_reply"
 - id: id id
 - ver:
 - error:
 - data:
 - id:
 - size:
 - name: ,utf8
- "320030003200330030003900300031003000390035003000310032002E006D0070003300" 20230901095012.mp3 3200 2,3000 0,2E00
 .,6D00 m, 7000 p

6.3

app

```
{
  "method": "get",
  "id": "123",
  "ver": "1.0",
  "data": "edr_ctkd"
}
```

- method: 4 "get"
- id: 4 id 16 id 4
- ver: 4
- data: 4 "edr_ctkd"

8

```
{
  "method": "edr_ctkd_reply",
  "id": "123",
  "ver": "1.0",
  "data":
  [
    {"edr_name": "RecNow616c"},
    {"mac_addr": "ae92afd2616c"},
    {"connect_state": "connected"}
  ],
  "error": []
}
```

- method: 4 "edr_ctkd_reply"
- id: 4 id 16 id 4
- ver: 4
- error: 4
- data:
 - edr_name 8, 8 4 mac 4
 - mac_addr 8 mac 4
 - connect_state 16 "connected"/"disconnected"

6.4 6 SD 6 (6)

XXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXX

sdXXXX app

XXXXXXXXXXXXXXXXXXXX

6.5 向 "XXXX" 发送 SDXXXX

appXXXX

```
{
  "method": "set",
  "id": "123",
  "ver": "1.0",
  "data": {
    "sd_del_name": "20240605105111.MP3"
  }
}
```

- method: XXX "set"
- id: XXXX idXXXXXXXXXXXX idXXXX
- ver: XXXXXX
- data
 - sd_del_nameXXXX
 - 20240605105111.MP3XXXX SDXXXX "MP3XXXX"

XXXXXXXXXX

```
{
  "method": "sd_del_name_reply",
  "id": "123",
  "ver": "1.0",
  "data": [
    {"sd_del_name": "success"}
  ],
  "error": []
}
```

- methodXXXX "sd_del_name_reply"
- id: XXXXXX idXXXXXXXXXXXX idXXXX
- ver: XXXXXX
- error[] XXXXXXX

- data:
 - sd_del_name[4] ,success[4]

6.6 设置 SD

sd[4]

app[4]

```
{
  "method": "set",
  "id": "123",
  "ver": "1.0",
  "data": "sd_format"
}
```

- method: [4] "set"
- id: [4] id[16] id[4]
- ver: [4]
- data [4] sd_format[4]

[8]

```
{
  "method": "sd_format_reply",
  "id": "123",
  "ver": "1.0",
  "data": [
    {"sd_format": "success"}
  ],
  "error": []
}
```

- method[4] "sd_format_reply"
- id: [4] id[16] id[4]
- ver: [4]
- error [4]
- data:
 - sd_format[4] ,success[4]




6.7 设置

app[][][][][][][]

```
{
  "method": "s_begin_rec",
  "id": "123",
  "ver": "1.0",
  "params": []
}
```

- method: `[]` "s_begin_rec"
- id: `[]` id `[]` id `[]`
- ver: `[]`
- params `[]`

[illegible]

 APP 00010203-0405-0607-0809-0A0B0C0D2B18


```
{
  "method": "e_rec_start",
  "id": "123",
  "ver": "1.0",
  "params": [{"rec_state": "live"}]
}
```

- method: "e_rec_start"
- id: id id id
- ver:
- error:
- params:
 - rec_state live phone_in phone_out null

6.8

--	--	--	--

app[][][][][][][]

```
{
  "method": "s_stop_rec",
  "id": "123",
```

```
"ver": "1.0",
"params":[]
}
```

- method: "s_stop_rec"
- id: id id
- ver:
- params

```
{
  "method": "e_rec_stop",
  "id": "123",
  "ver": "1.0",
  "params":[]
}
```

- method "e_rec_stop"
- id: id id
- ver:
- error
- params:

6.9

app

```
{
  "method": "s_recover",
  "id": "123",
  "ver": "1.0",
  "params":[]
}
```

- method: "s_recover"
- id: id id
- ver:
- params


```
{
  "method": "s_recover_reply",
  "id": "123",
  "ver": "1.0",
  "data":[
    {"s_recover":"suceess"}
  ],
  "error":[]
}
```

- method: `s_recover_reply`
- id: `123` id: `123` id: `123`
- ver: `1.0`
- error: `[]`
- data: `{ "s_recover": "suceess" }`

6.10 `s_reset`

app: `s_reset`

```
{
  "method": "s_reset",
  "id": "123",
  "ver": "1.0",
  "params":[]
}
```

- method: `s_reset`
- id: `123` id: `123` id: `123`
- ver: `1.0`
- params: `[]`

`s_reset_reply`

```
{
  "method": "s_reset_reply",
  "id": "123",
  "ver": "1.0",
  "data":[
    {"s_reset":"suceess"}
  ]
}
```

```

    ],
    "error":[]
}

```

- method[] "s_reset_reply"
- id:[] id[] id[]
- ver: []
- error[] [] key
- data:{"s_reset":"suceess"}[]

6.11 []

app[]

```

{
  "method":"s_ble_disconnect",
  "id": "123",
  "ver": "1.0",
  "data":[]
}

```

- method: [] "s_ble_disconnect"
- id:[] id[] id[]
- ver: []
- data[]

[]

```

{
  "method":"s_ble_disconnect_reply",
  "id": "123",
  "ver": "1.0",
  "params":[]
}

```

- method[] "s_ble_disconnect_reply"
- id:[] id[] id[]
- ver: []
- error[] [] key
- params:{"s_reset":"suceess"}[]

6.12 请求

app请求

```
{
  "method": "s_remove_binding",
  "id": "123",
  "ver": "1.0",
  "data": []
}
```

- method: 请求方法 "s_remove_binding"
- id: 请求ID id
- ver: 请求版本
- data: 请求数据

响应

```
{
  "method": "s_remove_binding_reply",
  "id": "123",
  "ver": "1.0",
  "params": []
}
```

- method: 响应方法 "s_remove_binding_reply"
- id: 响应ID id
- ver: 响应版本
- error: 错误码 key
- params: 响应参数

6.13 响应

app响应

```
{
  "method": "s_dut_test_mode",
  "id": "123",
  "ver": "1.0",
  "params": []
}
```

```
}
```

- method: `s_dut_test_mode`
- id: `123` id `123` id `123`
- ver: `1.0`
- params:

```
1234567890
```

```
{
  "method": "s_dut_test_mode_reply",
  "id": "123",
  "ver": "1.0",
  "params": []
}
```

- method `s_dut_test_mode_reply`
- id: `123` id `123` id `123`
- ver: `1.0`
- error: `1234567890` key
- params:

7. `1234`

```
12345678901234567890
```

```
/1234567890
```

app

```
1234567890 app, app12345678901234567890
```

7.1 `12345678`

```
12345678901234567890
```

```
12345678901234567890
```

```
{
  "method": "e_rec_start",
  "id": "123",
  "ver": "1.0",
  "params": [{"rec_state": "live"}]
}
```

- method: 方法 "e_rec_start"
- id: 请求ID id app 应用ID id
- ver: 版本号
- params: 参数

APP 应用

```
{
  "method": "e_rec_start_reply",
  "id": "123",
  "ver": "1.0",
  "data": [{"e_rec_start": "success"}],
  "error": []
}
```

- method: 方法 "e_rec_start_reply"
- id: 请求ID id app 应用ID id
- ver: 版本号
- data:

7.2 应用

应用ID

应用ID

```
{
  "method": "e_rec_stop",
  "id": "123",
  "ver": "1.0",
  "data": []
}
```

- method: 方法 "e_rec_stop"
- id: 请求ID id app 应用ID id
- ver: 版本号
- params: 参数

APP 应用

```
{
  "method": "e_rec_stop_reply",
```

```

    "id": "123",
    "ver": "1.0",
    "data":[{"e_rec_stop":"success"}],
    "error":[]
}

```

- method[] "e_rec_stop_reply"
- id:[] id app[] id[]
- ver: []
- data:{"e_rec_stop":"success"} app[]

7.3 [] BLE[]

[] APP[]

APP[]

[]

[]

APP[]

```

{
  "method":"e_ble_disconnected",
  "id":"233",
  "ver":"V1.31",
  "data":[]
}

```

- method: [] "e_ble_disconnected"
- id:[] id app[] id[]
- ver: []
- data[]

APP[]

```

{
  "method":"e_ble_disconnected",
  "id": "123",
  "ver": "V1.31",
  "data":[{"e_ble_disconnected":"success"}],
  "error":[]
}

```

- method: "e_ble_disconnected"
- id: id app id
- ver:
- data: {"e_ble_disconnected": "success"} app
 APP

7.4

 0-100 30

```
{
  "method": "e_battery",
  "id": "123",
  "ver": "1.0",
  "data": [{"e_battery": 100}]
}
```

- method: "e_battery"
- id: id app id
- ver:
- data: {"e_battery": 100} 100

APP

```
{
  "method": "e_battery_reply",
  "id": "123",
  "ver": "1.0",
  "data": [{"e_battery": "success"}],
  "error": []
}
```

- method: "e_battery_reply"
- id: id app id
- ver:
- data: {"e_battery": "success"} app

7.5

XXXXXXXXXX

XXXXXXXXXX

```
{
  "method": "e_bt_connected",
  "id": "233",
  "ver": "V1.31",
  "data": []
}
```

- method: XXX "e_bt_connected"X
- id: XXXXXX idX appXXXXXX idXXXXXX
- ver: XXXXXXXX
- dataX {"e_battery":100}XXXXX 100

APPXXXXXXXX

```
{
  "method": "e_bt_connected_reply",
  "id": "123",
  "ver": "1.0",
  "data": [{"e_bt_connected": "success"}],
  "error": []
}
```

- methodXXXX "e_bt_connected_reply"
- id: XXXXXX idX appXXXXXX idXXXXXX
- ver: XXXXXXXX
- data: {"e_bt_connected": "success"}XX appXXXXXX

7.6 XXXXXXXXXXXX

XXXXXXXXXX

XXXXXXXXXX

```
{
  "method": "e_bt_disconnected",
  "id": "233",
  "ver": "V1.31",
```



```
"data":[]
}
```

- method: 0000 "e_bt_connected"
- id:00000000 id 0 app00000000 id00000000
- ver: 00000000
- data 0 {"e_battery":100}000000 100

APP00000000

```
{
  "method":"e_bt_connected_reply",
  "id": "123",
  "ver": "1.0",
  "data":[{"e_bt_disconnected":"success"}],
  "error":[]
}
```

- method0000 "e_bt_connected_reply"
- id:00000000 id 0 app00000000 id00000000
- ver: 00000000
- data:{"e_bt_disconnected":"success"}00 app00000000

7.7 0000000000

0000000000

```
{
  "method": "s_recover_reply",
  "id": "123",
  "ver": "1.0",
  "data":[
    {"s_recover":"succeess"}
  ],
  "error":[]
}
```

- method: 0000 "s_recover_reply"
- id:00000000 id 0 app00000000 id00000000
- ver: 00000000
- data 0

APP[] [] [] [] [] []

```
{
  "method": "recover_ready",
  "id": "123",
  "ver": "1.0",
  "data": []
}
```

- method: [] [] [] "recover_ready"
- id: [] [] [] [] [] [] id [] app [] [] [] [] [] [] id [] [] [] [] [] []
- ver: [] [] [] [] [] [] [] []
- data:

7.8 [] [] [] []

[] [] [] [] [] [] [] [] [] [] [] []

```
{
  "method": "s_reset_reply",
  "id": "123",
  "ver": "1.0",
  "data": [
    { "s_reset": "suceess" }
  ],
  "error": []
}
```

- method: [] [] [] "s_reset_reply" []
- id: [] [] [] [] [] [] [] id [] app [] [] [] [] [] [] id [] [] [] [] [] []
- ver: [] [] [] [] [] [] [] []
- data []

APP[] [] [] [] [] []

```
{
  "method": "s_reset_reply",
  "id": "123",
  "ver": "1.0",
  "data": []
}
```

```
}
```

- method: "s_reset_reply"
- id: id app id
- ver:
- data:

8. SD

SD uuid 00010203-0405-0607-0809-0A0B0C0D2B22

8.1 APP SD

,APP ,

app

```
{
  "method": "s_update_start",
  "id": "123",
  "ver": "1.0",
  "params": [
    { "file_name": "20240605103744.MP3" },
    { "block_index": 0 },
    { "block_size": 1024 }
  ]
}
```

- method: "s_update_start"
 - id: id id
 - ver:
 - params
 - file_name
 - block_index: 0 , 0 , n
 - block_size: 1024
- offset=block_index*block_size;
- block_size mtu

 8  ( crc )

XXXXXXXXXX

[85, 170, 1, 246, 1, 2, 3, 4, 255, 243, 200, 196, 0, 10, 146, 70, 24, 0, 56, 68, 117, 0, 49, 144, 120, 91, 249, 236, 99, 121, 3, 255, 255, 255, 255, 255, 255, 255, 255, 247, 255, 255, 255, 255, 253, 122, 184, 65, 221, 255, 255, 255, 255, 255, 255, 255, 191, 255, 255, 255, 252, 192,.....]

block_size=[1,246] 0x01F6=502; block_index=[1 2 3 4] 0x01020304=16909060

XXXXXXXX 8XXXX [85, 170, 1, 246, 1 2 3 4]

XXXXXXXXXX (XXXXXX crcXXXX)

8.2 APPXXXX SDXXXX

appXXXXXX

{
 "method": "s_update_cancel",
 "id": "123",
 "ver": "1.0",
 "params": []
}

- method: XXX "s_update_cancel"
- id:XXXXXX idXXXXXXXXXXXX idXXXX
- ver: XXXXXXX
- params

XXXXXXXXXX

SDXXXXXX uuid 00010203-0405-0607-0809-0A0B0C0D2B22
XXXXXXXXXXXX

{
 "method": "s_update_cancel_reply",
 "id": "123",
 "ver": "1.0",
 "data": [
 {"s_update_cancel": "succeess"}
],
 "error": []
}

```
}
```

- method: "s_update_cancel_reply"
- id: id id id
- ver:
- error: key
- data: {"s_update_cancel": "suceess"}

8.3 APP SD

app

```
{  
  "method": "s_update_pause",  
  "id": "123",  
  "ver": "1.0",  
  "params": []  
}
```

- method: "s_update_pause"
- id: id id id
- ver:
- params:

SD uuid 00010203-0405-0607-0809-0A0B0C0D2B22

```
{  
  "method": "s_update_pause_reply",  
  "id": "123",  
  "ver": "1.0",  
  "data": [  
    {"s_update_pause": "suceess"}  
  ],  
  "error": []  
}
```

- method: "s_update_pause_reply"
- id: id id id

- ver: []
- error [] key
- data: {"s_update_pause":"suceess"} []

8.4 []

[]

```
{
  "method":"s_update_end",
  "id":"123",
  "ver":"1.0",
  "params":[]
}
```

- method: [] "s_update_end"
- id:[] id [] id []
- ver: []
- params []

APP []

[]

```
{
  "method":"s_update_end_reply",
  "id":"123",
  "ver":"1.0",
  "data":[
    {"s_update_end_reply":"suceess"}
  ],
  "error":[]
}
```

- method [] "s_update_end_reply"
- id:[] id [] id []
- ver: []
- error [] key
- data: {"s_update_end_reply":"suceess"} []

[]

#38

 huangyong 30 2024 05:54:13

 huangyong 4 2024 10:09:03