

Hi Ebowwa,

Here is my plan

Spend a bit more time to find out the root cause.

1. Is it some miss-config? or
2. Fundamentally the SW stack (BlueZ+BlueAlsa) cannot support the HF mode on the Linux Embedded Device <https://github.com/Arkq/bluez-alsa/wiki/Using-BlueALSA-with-HFP-and-HSP-Devices#hfp>

If it's the latter, don't bother; maybe I can ask for some expert's help later.

If we can fix the problem, I will leverage this asking for their engineering sample glasses (with displays)

-Q

Problem Statement – Disconnect in HF mode

HW: RV1106 + RTK chip

SW: Linux + BlueZ + BlueAlsa

Observations:

1. [a2dp] Device can connect to a phone and seems okay to play a youtube audio (no disconnect and show audio playing on BlueZ device)
2. [HFP/SCO] However, when making a phone call, it automatically disconnect

Note:

it seems most linux bluez applications are used as a central device not client side (Maybe there are missing SW stacks completely i'm not sure). I have tried all different combinations of test command lines but no luck. Maybe I need to re-compile some source code? I believe the device has only off-the-shelf RV1106 bareboard, (no development at all from the glass vendor (i may need to ask to confirm).

```

.../GitHub/bluetooth/riscv-gnu-toolchain — adb shell
HV3 may be used
EV3 may be used
EV4 may be used
EV5 may be used
> HCI Event: Command Status (0x0f) plen 4 #185 [hci0] 553.907402
Accept Synchronous Connection Request (0x01|0x0029) ncmd 2
Status: Success (0x00)
> HCI Event: Synchronous Connect Compl.. (0x2c) plen 17 #186 [hci0] 553.914342
Status: Success (0x00)
Handle: 8
Address: E8:D5:2B:13:B5:AB (OUI E8-D5-2B)
Link type: eSCO (0x02)
Transmission interval: 0x0c
Retransmission window: 0x04
RX packet length: 60
TX packet length: 60
Air mode: CVSD (0x02)
< HCI Command: Disconnect (0x01|0x0006) plen 3 #187 [hci0] 553.926262
Handle: 8
Reason: Remote User Terminated Connection (0x13)
> HCI Event: Command Status (0x0f) plen 4 #188 [hci0] 553.927335
Disconnect (0x01|0x0006) ncmd 2
Status: Success (0x00)
> HCI Event: Disconnect Complete (0x05) plen 4 #189 [hci0] 553.958727
Status: Success (0x00)
Handle: 8
Reason: Connection Terminated By Local Host (0x16)
> ACL Data RX: Handle 7 flags 0x02 dlen 22 #190 [hci0] 555.830132
Channel: 64 len 18 [PSM 3 mode Basic (0x00)] {chan 0}
RFCOMM: Unnumbered Info with Header Check (UIH) (0xef)
Address: 0x3b cr 1 dlc1 0x0e
Control: 0xef poll/final 0
Length: 14
FCS: 0xa5
0d 0a 2b 43 49 45 56 3a 20 31 2c 31 0d 0a a5 ...+CIEV: 1,1...
> ACL Data RX: Handle 7 flags 0x02 dlen 22 #191 [hci0] 555.831897
Channel: 64 len 18 [PSM 3 mode Basic (0x00)] {chan 0}
RFCOMM: Unnumbered Info with Header Check (UIH) (0xef)
Address: 0x3b cr 1 dlc1 0x0e
Control: 0xef poll/final 0
Length: 14
FCS: 0xa5
0d 0a 2b 43 49 45 56 3a 20 32 2c 30 0d 0a a5 ...+CIEV: 2,0...
> ACL Data RX: Handle 7 flags 0x02 dlen 22 #192 [hci0] 559.964980
Channel: 64 len 18 [PSM 3 mode Basic (0x00)] {chan 0}
RFCOMM: Unnumbered Info with Header Check (UIH) (0xef)
Address: 0x3b cr 1 dlc1 0x0e
Control: 0xef poll/final 0
Length: 14
FCS: 0xa5
0d 0a 2b 43 49 45 56 3a 20 31 2c 30 0d 0a a5 ...+CIEV: 1,0...
> HCI Event: Mode Change (0x14) plen 6 #193 [hci0] 560.967921
Status: Success (0x00)

```

is a virtual interface implemented on a physical serial interface (typically USB or UART, but other types can also be used). Other common hardware interfaces that are *not* used for HCI include i2s/PCM, i2c, etc. The Bluetooth Core Specification allows manufacturers to route SCO traffic through any interface, so they do not have to use the HCI for this.

BlueZ (and the Linux kernel bluetooth subsystem) can only communicate with a bluetooth module through the HCI. So for BlueALSA (and other BlueZ based services) to handle SCO profiles the SCO data *must* be transferred over the HCI. Therefore BlueALSA cannot support HFP or HSP with adapters that use some other interface for SCO.

Broadcom adapters allow the routing of SCO packets to be selected by a custom vendor HCI command. By default they route SCO to a PCM interface, but an application can use that custom command to change the routing to the HCI. BlueALSA sends this command when used with a Broadcom module, so HFP/HSP hopefully be available with adapters based on these modules.

Texas Instruments also have a custom vendor command for selecting HCI as the SCO interface that is known to work on some of their module families; however it is not clear from their documentation whether this command works on all their BT modules. The command can be invoked from the command line using the bluez utility `hcitool` thus:

```
hcitool cmd 0x3f 0x0210 0x01 0x00 0x00 0x00 0xFF
```

This command should be run before any remote devices are connected, and must be re-run whenever the TI adapter is powered on. If we can gather evidence that this command works on all TI module families then it may be possible to have it invoked by BlueALSA in the same way as is done for Broadcom modules. The list of Texas Instruments module families with which this is known to work is:

- CC256x
- WL183x

If you have a different TI module which appears to suffer this SCO routing issue then you can help by testing the above command then updating the above list.

Other brands may implement similar custom commands, but none at present has been made public so it is not possible for BlueALSA to support them unless they already default to using the HCI for SCO.

Most adapters *do* pass SCO data over the HCI, so you would need to test yours to know if is affected by this issue. One way

Use the Module as a Headset on a Call on your Host Device



Firstly, ensure the headset is properly plugged into the carrier board for using its speakers and microphone. Then, create a file named `alsaloop_call.sh` and add the following according to your Module Family. Do not forget to change the parameter `<BT-addr_device>` to the Bluetooth address of your Bluetooth device.

```
alsaloop -g /dev/stdin <<EOF
-C bluealsa:SRV=org.bluealsa,DEV=<BT-addr_device>,PROFILE=sco -P plughw:0,0 -r 8000 -c 1 --buffer=300
-C plughw:0,0 -P bluealsa:SRV=org.bluealsa,DEV=<BT-addr_device>,PROFILE=sco -r 8000 -c 1 -f s16_le --
EOF
```

Attention to the segment `plughw:0,0`, because both the numbers zero represent the card and device indexes according to the output of `aplay -l` for line 2 in the code snippet, and `arecord -l` in line 3.

Further, tests showed that sending audio to the module via Bluetooth requires setting the buffer size. However, the tests also showed that no buffer size setup is needed when the module receives audio via Bluetooth. Verify which option is better for your device by changing the flags `--sync` and `--buffer`.

Then, run:

```
# sh alsaloop_call.sh
```

<https://developer.toradex.com/linux-bsp/application-development/multimedia/bluetooth-audio-linux/>

Commands

```
# initialize ble_init.sh
```

```
#!/bin/bash
set -e
```

```
echo "[INFO] Killing previous services..."
```

```
killall -q dbus-daemon bluetoothd rtkhci bluealsa bluealsa-aptplay || true
rm -f /run/messagebus.pid
```

```
echo "[INFO] Mounting /var/lib/bluetooth to tmpfs..."
```

```
mkdir -p /tmp/bluetooth
mount --bind /tmp/bluetooth /var/lib/bluetooth
```

```
echo "[INFO] Starting dbus-daemon..."
```

```
dbus-daemon --system --print-pid --print-address &
ls /var/run/dbus/system_bus_socket
```

```
sleep 1
if ! ps aux | grep -v grep | grep -q dbus-daemon; then
```

```
echo "[INFO] Initializing RTL8723D firmware..."
cd /userdata
chmod +x ./rtkhci
./rtkhci -n -s 115200 /dev/ttyS5 rtk_h5 &

sleep 3

echo "[INFO] Bringing up Bluetooth interface..."
rfkill unblock bluetooth
hciconfig hci0 up
sleep 1
hciconfig hci0 piscan
sleep 3
hciconfig hci0 name 'Memo-i'
sleep 1

hciconfig hci0 down
sleep 1

hciconfig hci0 up
sleep 1
hciconfig hci0 piscan
sleep 3


# Below shows the initialization of HF; use experimental

/usr/libexec/bluetooth/bluetoothd --experimental --compat -n -d &

# The --experimental flag is required for HFP HF support in newer BlueZ builds.

# manually add
sdptool add HF
sdptool add A2SNK

# add hfp-hf profile
#bluealsa -p a2dp-sink -p hfp-hf --dbus=org.bluealsa &
bluealsa -p a2dp-sink -p hfp-hf --hfp-msc --dbus=org.bluealsa &


# bluealsa -p hfp-hf --dbus=org.bluealsa &
# bluealsa --dbus=org.bluealsa -p hfp-hf > /tmp/bluealsa.log 2>&1 &
# This one build and mange the client side hf profile


# connect the phone
bluetoothctl
power on
agent on
Default-agent
Scan on


discoverable on
pairable on


# call the phone
bluealsa-apply --verbose --pcm=null --profile-sco 00:00:00:00:00:00 &


# monitor
btmon
```

LOG

```
E8:D5:2B:13:B5:AB bleutooth
bluealsa-apply --profile=hfp "E8:D5:2B:13:B5:AB" &
bluealsa --profile=hfp-hf --profile=a2dp-sink &
bluealsa-apply --verbose --pcm=hw:0,0 --profile-sco &
bluealsa-apply --verbose --pcm=hw:0,0 --profile-sco E8:D5:2B:13:B5:AB
bluealsa-apply --verbose --pcm=null --profile-sco E8:D5:2B:13:B5:AB
ln -s /usr/libexec/bluetooth/bluetoothd /usr/bin/bluetoothd
bluealsa -p a2dp-sink -p hfp-hf &
rm -f /run/messagebus.pid
dbus-daemon --system &
/usr/libexec/bluetooth/bluetoothd --compat -n -d &
hciconfig hci0 up
hciconfig hci0 piscan
/usr/libexec/bluetooth/bluetoothd --compat -n -d &
bluealsa -p a2dp-sink -p hfp-hf &
bluetoothd -n -d
./adb push rtl8723d_fw /lib/firmware/rtlbt/rtl8723d_fw
./adb push rtl8723d_config /lib/firmware/rtlbt/rtl8723d_config
./adb push rtkhci /userdata
chmod 777 rtkhci
iwconfig wlan0 up
ifconfig wlan0 up
#
killall dbus-daemon
rm /run/messagebus.pid
dbus-daemon --system --print-pid --print-address
```

```
cat /sys/class/rfkill/rfkill1/uevent
echo 1 > /sys/class/rfkill/rfkill1/state
cat /sys/class/rfkill/rfkill1/uevent
hciconfig hci0 up
/usr/libexec/bluetooth/bluetoothd --compat -n &
sdptool add HF
hciconfig hci0 up
hciconfig hci0 piscan
hciconfig hci0 name 'Memo-i'
hciconfig hci0 down
hciconfig hci0 up
bluealsa --profile=a2dp-sink &
bluealsa-apply --profile-a2dp 00:00:00:00:00:00 &
hciconfig hci0 class 0x240404
bluetoothctl
# D-Bus
killall dbus-daemon
rm /run/messagebus.pid
dbus-daemon --system --print-pid --print-address
#
./rtkhci -n -s 115200 /dev/ttyS5 rtk_h5 &
#
hciconfig hci0 up
/usr/libexec/bluetooth/bluetoothd --compat -n &
sdptool add A2SNK
hciconfig hci0 piscan
hciconfig hci0 name 'luckfox'
hciconfig hci0 down
hciconfig hci0 up
bluealsa --profile=a2dp-sink &
bluealsa-apply --profile-a2dp 00:00:00:00:00:00 &
hciconfig hci0 class 0x240404
bluetoothctl
#
hcitool scan
#obex
export DBUS_SESSION_BUS_ADDRESS="unix:path=/var/run/dbus/system_bus_socket"
vi /etc/dbus-1/system.d/bluetooth.conf
<allow send_destination="org.bluez.obex"/>
obexd -n -d
dbus-run-session -- bt-obex -s
[root@luckfox pico]# cd /userdata/
[root@luckfox pico userdata]# ls
ethaddr.txt      rtkhci
lost+found       wpa_supplicant.conf
[root@luckfox pico userdata]# chmod 777 rtkhci
[root@luckfox pico userdata]# wpa_supplicant -B -i wlan0 -c /wpa_supplicant.conf
Successfully initialized wpa_supplicant
Failed to open config file '/wpa_supplicant.conf', error: No such file or directory
Failed to read or parse configuration '/wpa_supplicant.conf'.
: CTRL-EVENT-DSCP-POLICY clear_all
[root@luckfox pico userdata]# wpa_supplicant -B -i wlan0 -c ./wpa_supplicant.conf
f
Successfully initialized wpa_supplicant
[root@luckfox pico userdata]# udhccp -i wlan0
udhccp: started, v1.36.1
udhccp: broadcasting discover
udhccp: broadcasting select for 192.168.160.228, server 192.168.160.115
udhccp: lease of 192.168.160.228 obtained from 192.168.160.115, lease time 3599
deleting routers
adding dns 192.168.160.115
[root@luckfox pico userdata]# killall dbus-daemon
/messagebus.pid
dbus-daemon --system --print-pid --print-address
[root@luckfox pico userdata]# rm /run/messagebus.pid
[root@luckfox pico userdata]# dbus-daemon --system --print-pid --print-address
unix:path=/run/dbus/system_bus_socket,guid=56e27cd5df362e4a08504b9567bfcd45
1179
[root@luckfox pico userdata]# ./rtkhci -n -s 115200 /dev/ttyS5 rtk_h5 &
[root@luckfox pico userdata]# Realtek Bluetooth init uart with init speed:115200, final_speed:115200, type:HCI UART H5
Realtek Bluetooth :Realtek hciattach version 3.1
Realtek Bluetooth :3-wire sync pattern resend : 1, len: 8
Realtek Bluetooth :Get SYNC Resp Pkt
Realtek Bluetooth :Get SYNC pkt-active mode
Realtek Bluetooth :3-wire config pattern resend : 1 , len: 10
Realtek Bluetooth :Get CONFIG pkt-active mode
Realtek Bluetooth :Get CONFIG resp pkt-active mode
Realtek Bluetooth :H5 init finished
Realtek Bluetooth :H5 IC
Realtek Bluetooth :RTK send HCI_VENDOR_READ_RTK_ROM_VERSION_Command
Realtek Bluetooth :Received reliable seqno 0 from card
Realtek Bluetooth :receive hci command complete event with command:1001
Realtek Bluetooth :Read Local Version Information with Status:0
Realtek Bluetooth :HCI Version 0x08
Realtek Bluetooth :HCI Revision 0x000d
Realtek Bluetooth :LMP Subversion 0x8723
Realtek Bluetooth :RTK send HCI_VENDOR_READ_RTK_ROM_VERSION_Command
Realtek Bluetooth :Received reliable seqno 1 from card
Realtek Bluetooth :receive hci command complete event with command:fc6d
Realtek Bluetooth :Read RTK rom version with Status:0
Realtek Bluetooth :LMP Subversion 0x8723
```

Realtek Bluetooth :Couldnt access customer BT MAC file /opt/bdaddr
Realtek Bluetooth :Couldnt open extra config /opt/rtk_btconfig.txt, No such file or directory
Realtek Bluetooth :Original Cfg len 47
Realtek Bluetooth :cfg offset (00f4),length (01)
Realtek Bluetooth :cfg offset (00f6),length (02)
Realtek Bluetooth :cfg offset (00fa),length (02)
Realtek Bluetooth :config baud rate to :0x04928002, hwflowcontrol:5f, 1
Realtek Bluetooth :cfg offset (00d9),length (01)
Realtek Bluetooth :cfg offset (00e4),length (01)
Realtek Bluetooth :55 ab 23 87 29 00 f4 00 01 01 f6 00 02 81 00 fa
Realtek Bluetooth :00 02 12 80 0c 00 10 02 80 92 04 50 c5 ea 19 e1
Realtek Bluetooth :1b fd af 5f 01 a4 0b d9 00 01 0f e4 00 01 08
Realtek Bluetooth :Cfg length 47
Realtek Bluetooth :Get config baud rate from config file:4928002
Realtek Bluetooth :Load FW OK
Realtek Bluetooth :rtk_get_fw_project_id: opcode 0, len 1, data 9
Realtek Bluetooth :fw_ver 0xaa7a8cb2, patch_num 3
Realtek Bluetooth :chip id 0x0001
Realtek Bluetooth :chip id 0x0002
Realtek Bluetooth :chip id 0x0003
Realtek Bluetooth :patch length is 0x8144
Realtek Bluetooth :start offset is 0x4980
Realtek Bluetooth :Svn version: 20130
Realtek Bluetooth :Coexistence: BTCOEX_20180125-2323
Realtek Bluetooth :fw: exists, config file: exists
Realtek Bluetooth :Total len 33139 for fw/config
Realtek Bluetooth :baudrate in change speed command: 0x2 0x80 0x92 0x4
Realtek Bluetooth :Received reliable seqno 2 from card
Realtek Bluetooth :receive hci command complete event with command:fc17
Realtek Bluetooth :Change BD Rate with status:0
Realtek Bluetooth :final_speed 1500000
Realtek Bluetooth :hw flow control enable
Realtek Bluetooth :iEndIndex:131 iLastPacketLen:127 iAdditionpkt:1
Realtek Bluetooth :hci_download_patch tx_index:0 rx_index: -1
Realtek Bluetooth :Received reliable seqno 3 from card
Realtek Bluetooth :rtk_hw_cfg.rx_index 0
Realtek Bluetooth :hci_download_patch tx_index:1 rx_index: 0
Realtek Bluetooth :Received reliable seqno 4 from card
Realtek Bluetooth :rtk_hw_cfg.rx_index 1
Realtek Bluetooth :hci_download_patch tx_index:2 rx_index: 1
Realtek Bluetooth :Received reliable seqno 5 from card
Realtek Bluetooth :rtk_hw_cfg.rx_index 2
Realtek Bluetooth :hci_download_patch tx_index:3 rx_index: 2
Realtek Bluetooth :Received reliable seqno 6 from card
Realtek Bluetooth :rtk_hw_cfg.rx_index 3
Realtek Bluetooth :hci_download_patch tx_index:4 rx_index: 3
Realtek Bluetooth :Received reliable seqno 7 from card
Realtek Bluetooth :rtk_hw_cfg.rx_index 4
Realtek Bluetooth :hci_download_patch tx_index:5 rx_index: 4
Realtek Bluetooth :Received reliable seqno 0 from card
Realtek Bluetooth :rtk_hw_cfg.rx_index 5
Realtek Bluetooth :hci_download_patch tx_index:6 rx_index: 5
Realtek Bluetooth :Received reliable seqno 1 from card
Realtek Bluetooth :rtk_hw_cfg.rx_index 6
Realtek Bluetooth :hci_download_patch tx_index:7 rx_index: 6
Realtek Bluetooth :Received reliable seqno 2 from card
Realtek Bluetooth :rtk_hw_cfg.rx_index 7
Realtek Bluetooth :hci_download_patch tx_index:8 rx_index: 7
Realtek Bluetooth :Received reliable seqno 3 from card
Realtek Bluetooth :rtk_hw_cfg.rx_index 8
Realtek Bluetooth :hci_download_patch tx_index:9 rx_index: 8
Realtek Bluetooth :Received reliable seqno 4 from card
Realtek Bluetooth :rtk_hw_cfg.rx_index 9
Realtek Bluetooth :hci_download_patch tx_index:10 rx_index: 9
Realtek Bluetooth :Received reliable seqno 5 from card
Realtek Bluetooth :rtk_hw_cfg.rx_index 10
Realtek Bluetooth :hci_download_patch tx_index:11 rx_index: 10
Realtek Bluetooth :Received reliable seqno 6 from card
Realtek Bluetooth :rtk_hw_cfg.rx_index 11
Realtek Bluetooth :hci_download_patch tx_index:12 rx_index: 11
Realtek Bluetooth :Received reliable seqno 7 from card
Realtek Bluetooth :rtk_hw_cfg.rx_index 12
Realtek Bluetooth :hci_download_patch tx_index:13 rx_index: 12
Realtek Bluetooth :Received reliable seqno 0 from card
Realtek Bluetooth :rtk_hw_cfg.rx_index 13
Realtek Bluetooth :hci_download_patch tx_index:14 rx_index: 13
Realtek Bluetooth :Received reliable seqno 1 from card
Realtek Bluetooth :rtk_hw_cfg.rx_index 14
Realtek Bluetooth :hci_download_patch tx_index:15 rx_index: 14
Realtek Bluetooth :Received reliable seqno 2 from card
Realtek Bluetooth :rtk_hw_cfg.rx_index 15
Realtek Bluetooth :hci_download_patch tx_index:16 rx_index: 15
Realtek Bluetooth :Received reliable seqno 3 from card
Realtek Bluetooth :rtk_hw_cfg.rx_index 16
Realtek Bluetooth :hci_download_patch tx_index:17 rx_index: 16
Realtek Bluetooth :Received reliable seqno 4 from card
Realtek Bluetooth :rtk_hw_cfg.rx_index 17
Realtek Bluetooth :hci_download_patch tx_index:18 rx_index: 17
Realtek Bluetooth :Received reliable seqno 5 from card
Realtek Bluetooth :rtk_hw_cfg.rx_index 18
Realtek Bluetooth :hci_download_patch tx_index:19 rx_index: 18

[illegible]

[illegible]

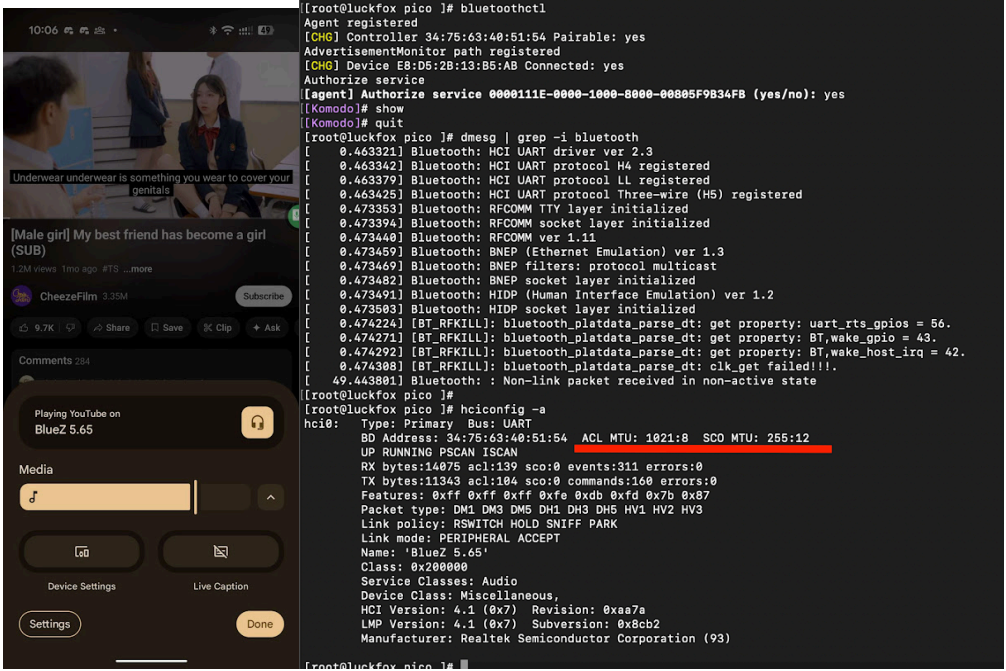
[illegible]


```
[root@luckfox pico userdata]# /usr/libexec/bluetooth/bluetoothd --compat -n &
[root@luckfox pico userdata]# sdptool add HF
[root@luckfox pico userdata]# bluetoothd[1216]: Bluetooth daemon 5.65
bluetoothd[1216]: Starting SDP server
bluetoothd[1216]: Bluetooth management interface 1.18 initialized
bluetoothd[1216]: Failed to set privacy: Rejected (0x0b)
[root@luckfox pico userdata]# hciconfig hci0 up
iconfig hci0 piscan
hciconfig hci0 name 'Memo-i'
hciconfig hci0 down
hciconfig hci0 up
bluealsa --profile=a2dp-sink &
bluealsa-aptlay --profile-a2dp 00:00:00:00:00:00 &
hciconfig hci0 class 0x240404
[root@luckfox pico userdata]# hciconfig hci0 piscan
[root@luckfox pico userdata]# hciconfig hci0 name 'Memo-i'
[root@luckfox pico userdata]# hciconfig hci0 down
[root@luckfox pico userdata]# hciconfig hci0 up
[root@luckfox pico userdata]# bluealsa --profile=a2dp-sink &
[root@luckfox pico userdata]# bluealsa-aptlay --profile-a2dp 00:00:00:00:00:00 &
[root@luckfox pico userdata]# hciconfig hci0 class 0x240404
[root@luckfox pico userdata]# bluealsa-aptlay: W: Couldn't get BlueALSA PCM list: The name org.bluealsa was not provided by
any .service files
bluetoothd[1216]: Endpoint registered: sender=:1.2 path=/org/bluez/hci0/A2DP/SBC/sink/1
bluetoothd[1216]: Endpoint registered: sender=:1.2 path=/org/bluez/hci0/A2DP/SBC/sink/2
[root@luckfox pico userdata]#
[root@luckfox pico userdata]#
[root@luckfox pico userdata]#
[root@luckfox pico userdata]#
[root@luckfox pico userdata]#
[root@luckfox pico userdata]#
[root@luckfox pico userdata]# bluestrl
/bin/sh: bluestrl: not found
[root@luckfox pico userdata]# bluectrl
/bin/sh: bluectrl: not found
[root@luckfox pico userdata]# bluetoothctl
Agent registered
[CHG] Controller 34:75:63:40:51:6B Pairable: yes
[bluetooth]# \
[bluetooth]# \
[DEL] Device 50:3D:C6:9A:C9:F5 Pluto      edmi K40 Pro
[NEW] Device 50:3D:C6:9A:C9:F5 Pluto      edmi K40 Pro
Request confirmation
[agent] Confirm passkey 756553 (yes/no): yes
[CHG] Device 50:3D:C6:9A:C9:F5 Bonded: yes
[CHG] Device 50:3D:C6:9A:C9:F5 Modalias: bluetooth:v038Fp1200d1436
[CHG] Device 50:3D:C6:9A:C9:F5 UUIDs: 00001105-0000-1000-8000-00805f9b34fb
[CHG] Device 50:3D:C6:9A:C9:F5 UUIDs: 0000110a-0000-1000-8000-00805f9b34fb
[CHG] Device 50:3D:C6:9A:C9:F5 UUIDs: 0000110c-0000-1000-8000-00805f9b34fb
[CHG] Device 50:3D:C6:9A:C9:F5 UUIDs: 00001112-0000-1000-8000-00805f9b34fb
[CHG] Device 50:3D:C6:9A:C9:F5 UUIDs: 00001115-0000-1000-8000-00805f9b34fb
[CHG] Device 50:3D:C6:9A:C9:F5 UUIDs: 00001116-0000-1000-8000-00805f9b34fb
[CHG] Device 50:3D:C6:9A:C9:F5 UUIDs: 0000111f-0000-1000-8000-00805f9b34fb
[CHG] Device 50:3D:C6:9A:C9:F5 UUIDs: 0000112f-0000-1000-8000-00805f9b34fb
[CHG] Device 50:3D:C6:9A:C9:F5 UUIDs: 00001132-0000-1000-8000-00805f9b34fb
[CHG] Device 50:3D:C6:9A:C9:F5 UUIDs: 00001200-0000-1000-8000-00805f9b34fb
[CHG] Device 50:3D:C6:9A:C9:F5 UUIDs: 00001800-0000-1000-8000-00805f9b34fb
[CHG] Device 50:3D:C6:9A:C9:F5 UUIDs: 00001801-0000-1000-8000-00805f9b34fb
[CHG] Device 50:3D:C6:9A:C9:F5 UUIDs: 00009955-0000-1000-8000-00805f9b34fb
[CHG] Device 50:3D:C6:9A:C9:F5 UUIDs: 0000fdaa-0000-1000-8000-00805f9b34fb
[CHG] Device 50:3D:C6:9A:C9:F5 UUIDs: 98b97136-36a2-11ea-8467-484d7e99a198
[CHG] Device 50:3D:C6:9A:C9:F5 ServicesResolved: yes
[CHG] Device 50:3D:C6:9A:C9:F5 Paired: yes
Authorize service
[agent] Authorize service 0000110d-0000-1000-8000-00805f9b34fb (yes/no): yes
[CHG] Device 50:3D:C6:9A:C9:F5 UUIDs: 00001105-0000-1000-8000-00805f9b34fb
[CHG] Device 50:3D:C6:9A:C9:F5 UUIDs: 0000110a-0000-1000-8000-00805f9b34fb
[CHG] Device 50:3D:C6:9A:C9:F5 UUIDs: 0000110c-0000-1000-8000-00805f9b34fb
[CHG] Device 50:3D:C6:9A:C9:F5 UUIDs: 0000110d-0000-1000-8000-00805f9b34fb
[CHG] Device 50:3D:C6:9A:C9:F5 UUIDs: 00001112-0000-1000-8000-00805f9b34fb
[CHG] Device 50:3D:C6:9A:C9:F5 UUIDs: 00001115-0000-1000-8000-00805f9b34fb
[CHG] Device 50:3D:C6:9A:C9:F5 UUIDs: 00001116-0000-1000-8000-00805f9b34fb
[CHG] Device 50:3D:C6:9A:C9:F5 UUIDs: 0000111f-0000-1000-8000-00805f9b34fb
[CHG] Device 50:3D:C6:9A:C9:F5 UUIDs: 0000112f-0000-1000-8000-00805f9b34fb
[CHG] Device 50:3D:C6:9A:C9:F5 UUIDs: 00001132-0000-1000-8000-00805f9b34fb
[CHG] Device 50:3D:C6:9A:C9:F5 UUIDs: 00001200-0000-1000-8000-00805f9b34fb
[CHG] Device 50:3D:C6:9A:C9:F5 UUIDs: 00001800-0000-1000-8000-00805f9b34fb
[CHG] Device 50:3D:C6:9A:C9:F5 UUIDs: 00001801-0000-1000-8000-00805f9b34fb
[CHG] Device 50:3D:C6:9A:C9:F5 UUIDs: 00009955-0000-1000-8000-00805f9b34fb
[CHG] Device 50:3D:C6:9A:C9:F5 UUIDs: 0000fdaa-0000-1000-8000-00805f9b34fb
[CHG] Device 50:3D:C6:9A:C9:F5 UUIDs: 98b97136-36a2-11ea-8467-484d7e99a198
[NEW] Transport /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/fd0
[Pluto      edmi K40 Pro]# bluetoothd[1216]: Endpoint registered: sender=:1.2 path=/org/bluez/hci0/A2DP/SBC/sink/3
bluetoothd[1216]: profiles/audio/avdtp.c:stream_rej_to_err() Too small packet for stream_rej
bluetoothd[1216]: profiles/audio/avdtp.c:session_cb() Unable to parse reject response
[DEL] Transport /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/fd0
Authorize service
[agent] Authorize service 0000110d-0000-1000-8000-00805f9b34fb (yes/no): yes
[NEW] Transport /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/fd1
[Pluto      edmi K40 Pro]# bluetoothd[1216]: profiles/audio/avdtp.c:stream_rej_to_err() Too small packet for stream_rej
bluetoothd[1216]: profiles/audio/avdtp.c:session_cb() Unable to parse reject response
```

```
[NEW] Transport /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/td2
[NEW] Player /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/player0 [default]
[CHG] Player /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/player0 Type: Audio
[CHG] Player /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/player0 Subtype: None
[CHG] Player /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/player0 Status: paused
[CHG] Player /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/player0 Name:
[CHG] Player /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/player0 Title:          ?62      €  ☰
      ?

[CHG] Player /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/player0 TrackNumber: 0x00000000 (0)
[CHG] Player /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/player0 NumberOfTracks: 0x00000000 (0)
[CHG] Player /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/player0 Duration: 0x0010c73c (1099580)
[CHG] Player /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/player0 Artist:          ?
[CHG] Player /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/player0 Position: 0x000026fb (9979)
[CHG] Player /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/player0 Position: 0x000026fb (9979)
[CHG] Player /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/player0 Status: playing
[CHG] Player /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/player0 Position: 0x00000000 (0)
[CHG] Player /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/player0 Title: unknow
[CHG] Player /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/player0 TrackNumber: 0x00000000 (0)
[CHG] Player /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/player0 NumberOfTracks: 0x00000000 (0)
[CHG] Player /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/player0 Duration: 0x00000000 (0)
[CHG] Player /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/player0 Album: unknow
[CHG] Player /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/player0 Artist: unknow
[CHG] Player /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/player0 Genre:
[CHG] Player /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/player0 Position: 0x00000000 (0)
[CHG] Player /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/player0 Title: Vicetone-nevada      ootleg      erry remix  ?
[CHG] Player /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/player0 TrackNumber: 0x00000000 (0)
[CHG] Player /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/player0 NumberOfTracks: 0x00000000 (0)
[CHG] Player /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/player0 Duration: 0x00030228 (197160)
[CHG] Player /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/player0 Album:      €      €
[CHG] Player /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/player0 Artist:      erry
[CHG] Player /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/player0 Position: 0x00007c51 (31825)
[Pluto      edmi K40 Pro]# bluetoothctl
[CHG] Transport /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/fd2 State: pending
[CHG] Transport /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/fd2 State: active
[Pluto      edmi K40 Pro]# bluealsa-apply: W: Couldn't open mixer: Mixer element not found
[CHG] Transport /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/fd2 State: idle
[CHG] Player /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/player0 Status: paused
[CHG] Player /org/bluez/hci0/dev_50_3D_C6_9A_C9_F5/player0 Position: 0x00009ee8 (40680)
[Pluto      edmi K40 Pro]#
```

Screenshot



HF registered

```
bluetoothd[1094]: src/battery.c:register_battery_provider() register battery provider path = /org/bluez/hci0/battery
bluetoothd[1094]: src/profile.c:register_profile() sender :1.3
bluetoothd[1094]: src/profile.c:create_ext() Created "Hands-Free unit"
bluetoothd[1094]: src/profile.c:ext_adapter_probe() "Hands-Free unit" probed
bluetoothd[1094]: src/profile.c:ext_start_servers() Hands-Free unit listening on chan 7
bluetoothd[1094]: src/adapter.c:adapter_service_add() /org/bluez/hci0
bluetoothd[1094]: src/sdpd-service.c:add_record_to_server() Adding record with handle 0x10006
bluetoothd[1094]: src/sdpd-service.c:add_record_to_server() Record pattern UUID 00000003-0000-1000-8000-00805f9
bluetoothd[1094]: src/sdpd-service.c:add_record_to_server() Record pattern UUID 00000100-0000-1000-8000-00805f9
bluetoothd[1094]: src/sdpd-service.c:add_record_to_server() Record pattern UUID 00001002-0000-1000-8000-00805f9
bluetoothd[1094]: src/sdpd-service.c:add_record_to_server() Record pattern UUID 0000111e-0000-1000-8000-00805f9
bluetoothd[1094]: src/sdpd-service.c:add_record_to_server() Record pattern UUID 00001203-0000-1000-8000-00805f9
bluetoothd[1094]: src/adapter.c:adapter_service_insert() /org/bluez/hci0
bluetoothd[1094]: src/adapter.c:add_uuid() sending add uuid command for index 0
bluetoothd[1094]: src/shared/mgmt.c:send_request() [0x0000] command 0x0010
bluetoothd[1094]: src/shared/mgmt.c:can_read_data() [0x0000] event 0x0007
bluetoothd[1094]: src/adapter.c:dev_class_changed_callback() Class: 0x200000
bluetoothd[1094]: src/shared/mgmt.c:can_read_data() [0x0000] command 0x0010 complete: 0x00
```

```
bluetoothd[1094]: src/agent.c:add_default_agent() Default agent set to :1.4 /org/bluez/agent
bluetoothd[1094]: src/adapter.c:set_mode() sending set mode command for index 0
bluetoothd[1094]: src/agent.c:agent_ref() 0x580aa0: ref=1
bluetoothd[1094]: src/agent.c:register_agent() agent :1.4
bluetoothd[1094]: src/shared/mgmt.c:send_request() [0x0000] command 0x0009
bluetoothd[1094]: src/shared/mgmt.c:can_read_data() [0x0000] command 0x0009 complete: 0x00
bluetoothd[1094]: src/adapter.c:new_settings_callback() Settings: 0x00000ad1
bluetoothd[1094]: src/adapter.c:settings_changed() Changed settings: 0x00000010
bluetoothd[1094]: src/adapter.c:settings_changed() Pending settings: 0x00000000
bluetoothd[1094]: src/shared/mgmt.c:send_request() [0x0000] command 0x0018
bluetoothd[1094]: src/shared/mgmt.c:can_read_data() [0x0000] command 0x0018 complete: 0x00
bluetoothd[1094]: Path / reserved for Adv Monitor app :1.4
```