



Instruction Manual

2018 NEW **ROiK-VV** ANDROID INTERFACE

DATE.
2019.02.25



COMPONENTS

| | | |
|---|---|---|
|  |  |  |
| ROiK-VV | Power/CAN Cable | Universal Cable |
|  |  |  |
| LVDS Cable | AV Cable | IR Cable |
|  |  |  |
| Speaker | External GLONASS GPS Antenna | WiFi/BT Antenna x 2 |
|  |  | |
| MIC | Key Pad | |
| | | |
| | | |
| | | |

SPEC

※ ANDROID

| | |
|--------------------|--|
| OS | Android 7.1.2(Nougat) |
| CPU | Six-Core 64bit Server Class Cortex-A72 Core @2.0Ghz, Mali-T860 Quad-Core GPU (Total Ten-Core) |
| VPN | H.264/H.265/VP9 up to 4Kx2K@60fps (4K Video) |
| Memory | 2GB DDR3 |
| USB | USB2.0 High Speed Port x 1 |
| USB 3.0 | USB3.0 5.0Gbps Port x 1 |
| Wireless | 2.4GHz/5GHz Dual-Band WiFi, Support 802.11a/b/g/n/ac, Bluetooth 4.1 |
| GPS | Ublox8 GPS (GLONASS/BEIDOU/GALILEO/QZSS/SBAS) |
| HDMI OUT | HDMI 2.0, Support maximum 4K@60Hz display |
| Speaker | 2W |
| I/O | MIC (Voice Recognition) |
| Temperature | -20°C ~ 80°C |
| Operating | -15°C ~ 70°C |

※ INTERFACE

| | |
|---------------------|---|
| Input Spec. | 1 x HDMI IN (1280x720), 2 x A/V Input (External Video Source) 1 x CVBS (Front Camera) 1 x CVBS (Rear Camera) |
| Output Spec. | 1 x Audio L/R Output 1 x LVDS Output (LCD Operation) |
| Power Spec. | Input Power : 12V DC ~ 24V DC Consumption Power : 12 Watt Max |
| I/O | Input : 6P Dip Switch Output : 12V Output (3A Max) DVB-T IR (Remote Control) DVD IR (Remote Control) |

DIP S/W INFORMATION

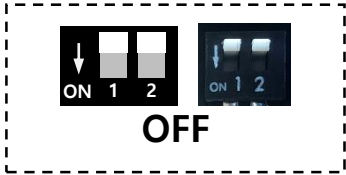
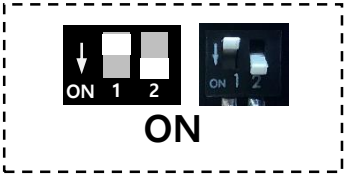


| Pin No. | On | Off |
|---------|--|-----------------------------------|
| 1 | External Rear Camera Or Using 360 AVM (aftermarket) | Original Rear Camera / 360 AVM |
| 2 | External Front Camera | Skip External Front Camera |
| 3 | No Function | |
| 4 | IR for ASUKA Touch | IR for Remote Controller |
| 5 | Using 360 AVM (aftermarket) | 360 AVM(aftermarket) not used |
| 6 | Selection of Car Model | |

※ Selection of Car Model

| 6 | Car Model |
|-----------|--|
| OFF | VOLVO (CAN Wire Position - Passenger's door) |
| ON | VOLVO (CAN Wire Position – OBDⅡ) |

DIP S/W INFORMATION



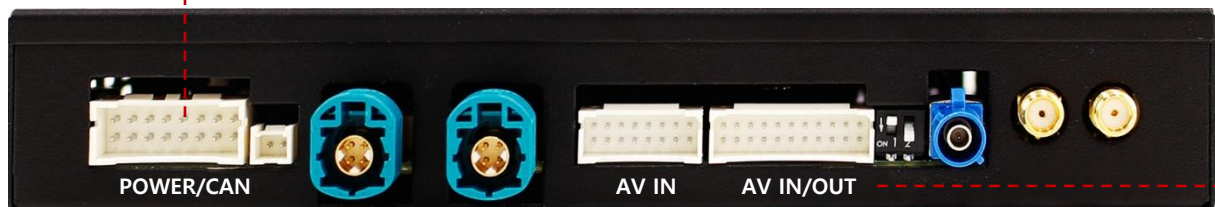
| Pin No. | On | Off |
|---------|---|-------------------------------|
| 1 | DIP S/W Num1 Must be OFF Only (OFF : ▲) | |
| 2 | Use External GPS Antenna (DIP S/W 2 Must ON) | Use Car GPS Cable (Option) |

CONNECTOR PIN ASSIGNMENT

**Power Cable
(POWER/CAN)**

| | | | | | | | |
|---|---|---|---|----|----|----|----|
| 1 | 3 | 5 | 7 | 9 | 11 | 13 | 15 |
| 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 |

| | | | | | | | |
|---------|-----|---------|----------|------------|-----------|-----|-----------|
| 1 | 3 | 5 | 7 | 9 | 11 | 13 | 15 |
| Yellow | | Purple | Green | Gray | White | | Brown |
| BATTERY | N.C | 12V_OUT | REVERSE | BUTTON_KEY | ECU_CAN_H | N.C | MON_5V_IN |
| 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 |
| Black | | | Blue | Orange | Blue | | |
| GND | N.C | N.C | REAR_12V | OMNI_KEY | ECU_CAN_L | N.C | N.C |



**AV Cable
(AV IN)**

| | | | | | | | |
|---|---|---|---|----|----|----|----|
| 1 | 3 | 5 | 7 | 9 | 11 | 13 | 15 |
| 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 |

| | | | | | | | |
|----------|----------|----------|----------|----------|----------|----------|---------|
| 1 | 3 | 5 | 7 | 9 | 11 | 13 | 15 |
| White | White | White | White | White | White | White | White |
| AV1_IN_V | AV1_IN_R | AV1_IN_L | AV2_IN_V | AV2_IN_R | AV2_IN_L | FRONT_IN | REAR_IN |
| 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 |
| Black | Black | Black | Black | Black | Black | Black | Black |
| GND | GND | GND | GND | GND | GND | GND | GND |

**Universal Cable
(AV IN/OUT)**

| | | | | | | | | | | |
|---|---|---|---|----|----|----|----|----|----|----|
| 1 | 3 | 5 | 7 | 9 | 11 | 13 | 15 | 17 | 19 | 21 |
| 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 |

| | | | | | | | | | | |
|-------|-----------|-----------|-------|------|------|------|------|-------|----------|----------|
| 1 | 3 | 5 | 7 | 9 | 11 | 13 | 15 | 17 | 19 | 21 |
| White | White | White | White | | | | | | Brown | |
| SPK_P | AUX_OUT_R | AUX_OUT_L | MIC_P | N.C. | N.C. | N.C. | N.C. | N.C. | DVB-T_IR | DVD_IR |
| 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 |
| Black | Black | Black | Black | | | | | White | Black | Red |
| SPN_N | AUX_GND | AUX_GND | MIC_N | N.C. | N.C. | N.C. | N.C. | IR_IN | IR_GND | IR_POWER |

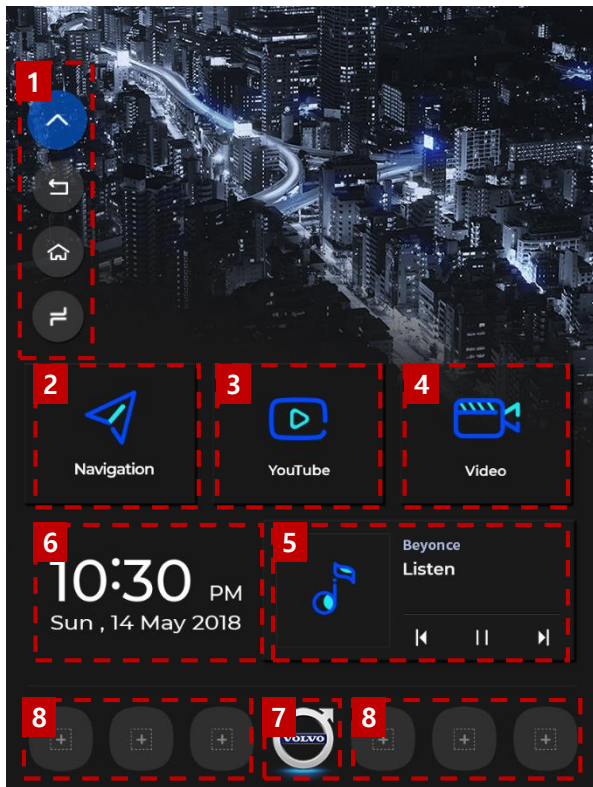
OEM BUTTON USAGE



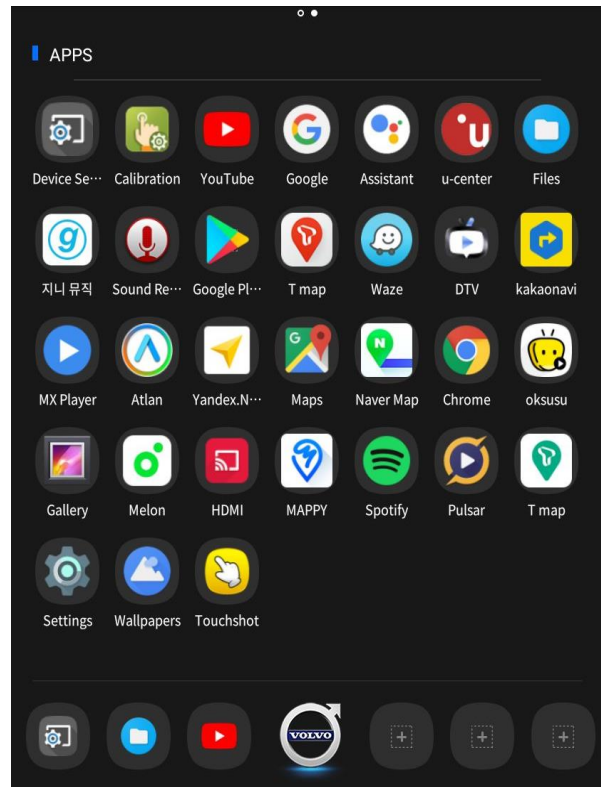
After the car is powered on and the OEM screen is output,
You can change the mode to ROiK screen after 20 seconds.

| No. | Button | Press | Function |
|-----|-------------|---------------------------------|-------------------|
| 1 | Home Button | Press Long the Button for 2 sec | Change to ROiK |
| | | Press the Button 2 time | Change to HDMI |
| | | Press the Button 3 time | Change to DTV |
| | | Press the Button 4 time | Change to DVD |
| | | Press the Button short Time | Return to the OEM |

SCREEN VIEW



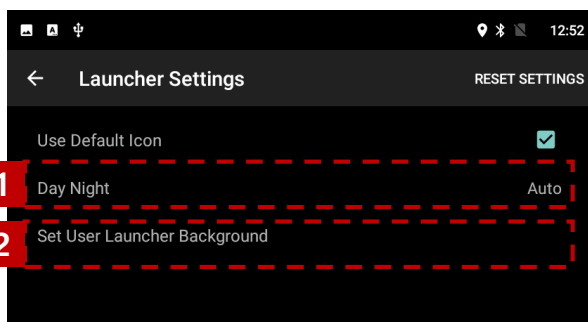
Main Screen



Apps Screen

| No. | Button | Function |
|-----|------------------------|--|
| 1 | Floating Button | Floating Button (Back, Home button, Multitasking button, External speaker button) |
| 2 | NAVIGATION | Quick icon for Navigation Application |
| 3 | YouTube | Quick icon for Youtube |
| 4 | Multimedia | Quick icon for Multimedia Application |
| 5 | Music Player | Music player Widget |
| 6 | Time & Date | Time & Date |
| 7 | Settings | Open Settings Menu |
| 8 | Quick Icon | Custom Quick Icon |

SCREEN VIEW – Change Background



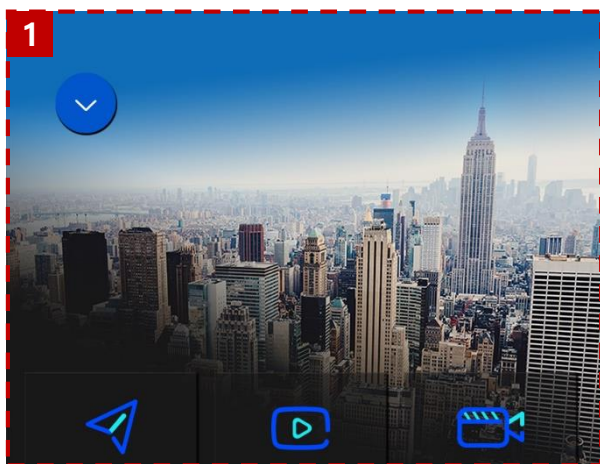
1. background is automatically converted to the actual time change.

(Can be set in device settings > Launcher Settings)

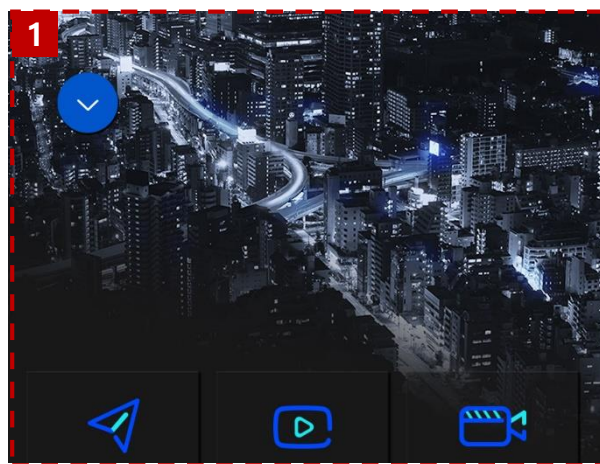
① Automatic / ② Set to Day background image / ③ Set to Night background image

2. Alternatively, you can change the background to another image.

(PNG, JPG / 892x1104 pixel)



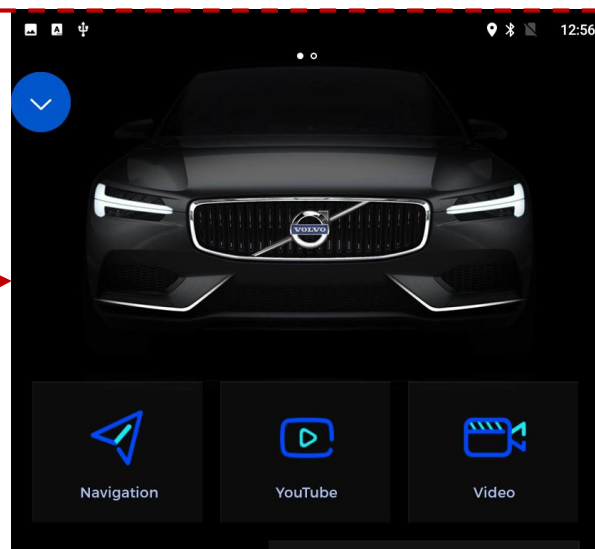
Day Screen



Night Screen



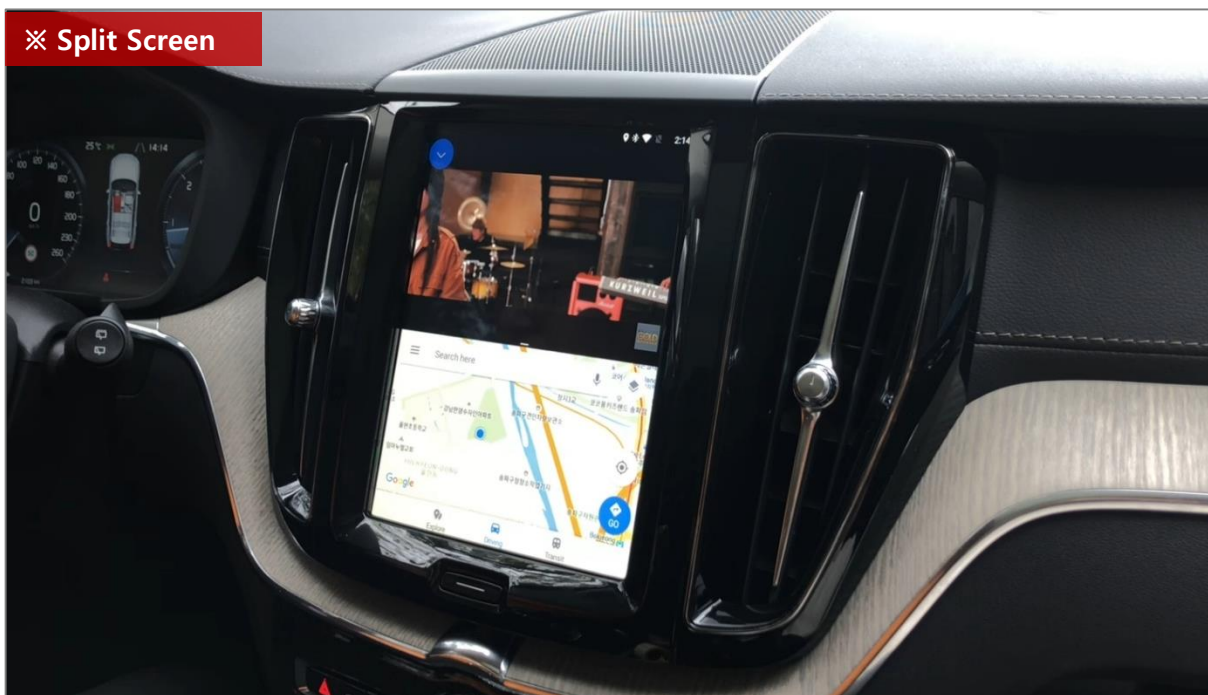
Your image



Apply as background

SCREEN VIEW – Split Screen Mode

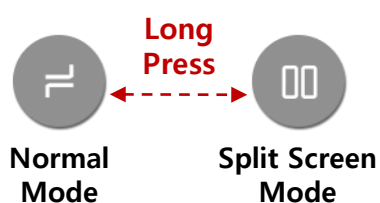
※ Split Screen



- 1 Press and hold the multi-tasking button to enter the split screen mode.
- 2 In the split screen mode, press center to reverse the direction.

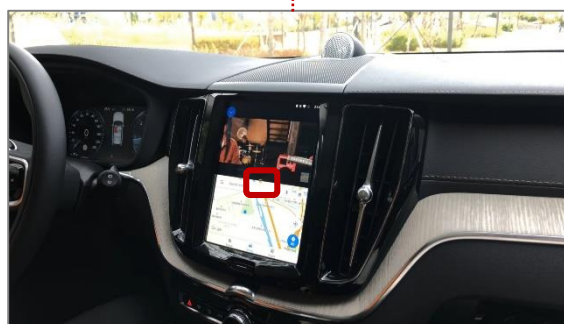
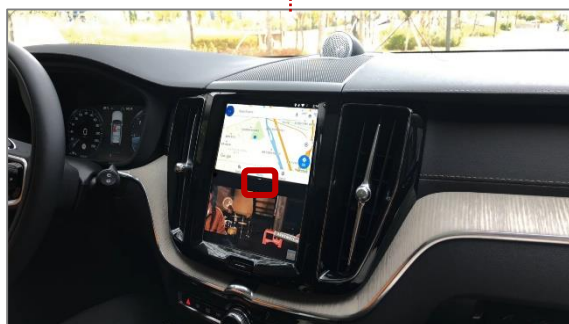
※ Some apps are not work on Split Screen Mode

1



2

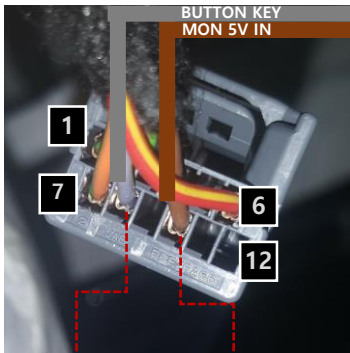
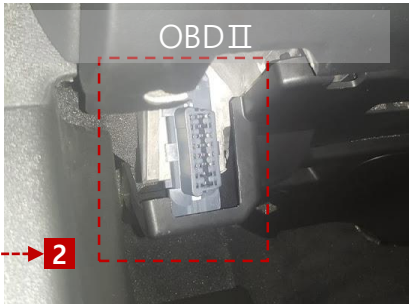
Press center : Reverse left to right



CONNECT CAN/POWER DIAGRAM - 1

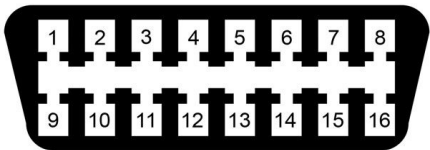
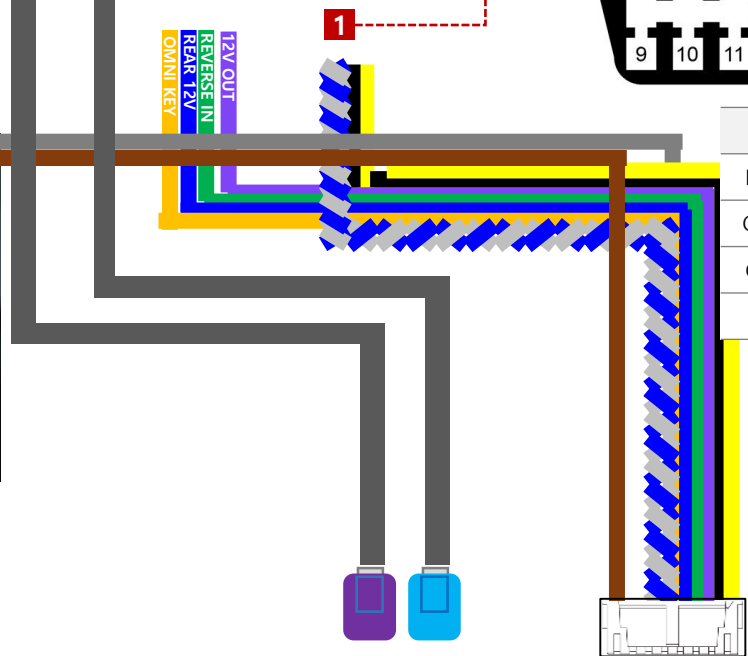


1. Connect CAN, BAT, GND to OBD2 Connector

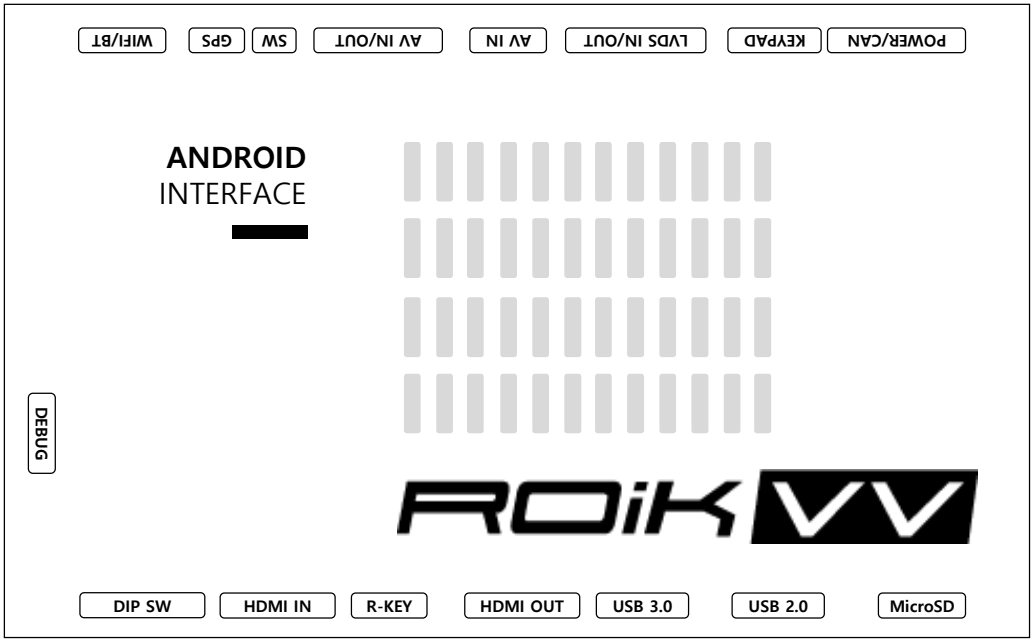


1. BUTTON KEY
2. MON 5V IN

Pin 8 : BUTTON KEY
Pin 10 : MON 5V IN



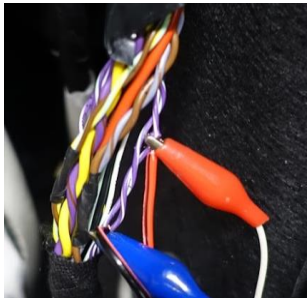
| Wire | Number |
|---------|--------|
| Battery | 16 |
| Ground | 4 |
| CAN H | 6 |
| CAN L | 14 |



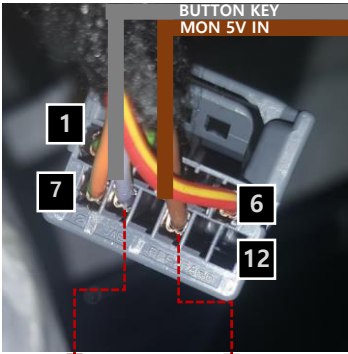
CONNECT CAN/POWER DIAGRAM - 2



1. Connect CAN, BAT, GND to wire between car body and passenger's door

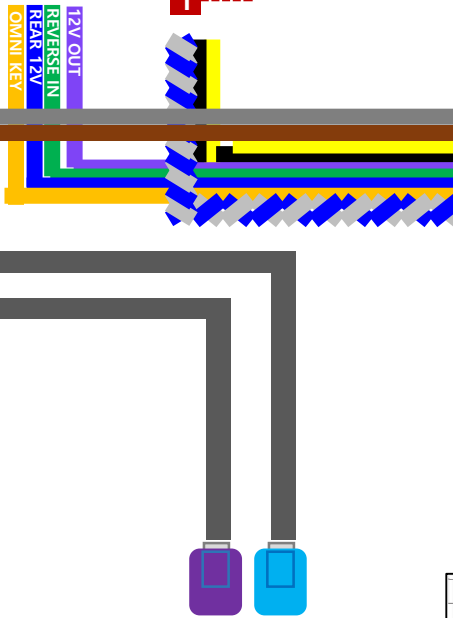


or

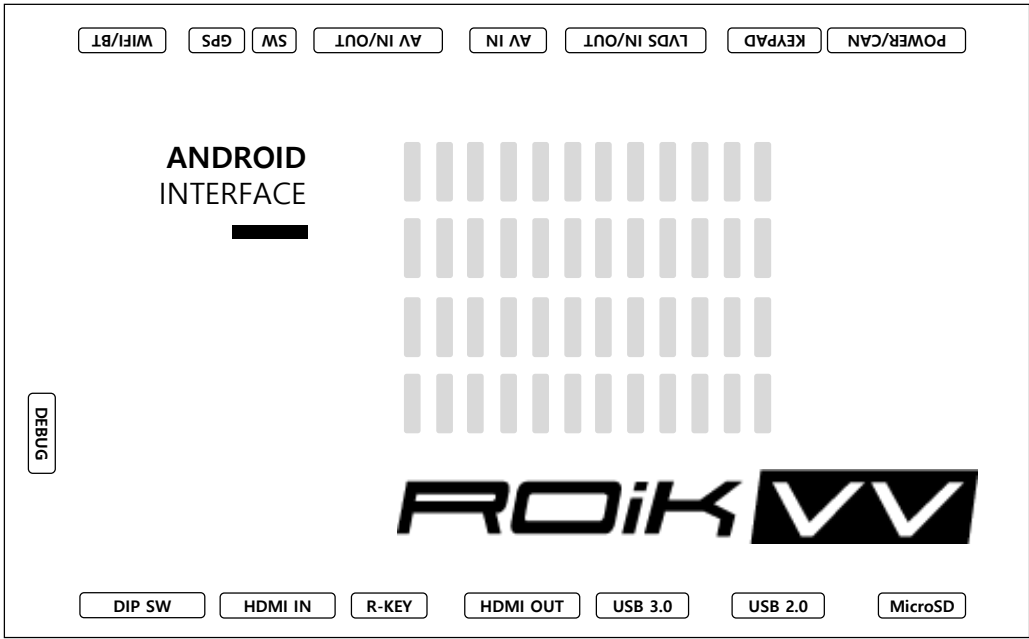


BUTTON KEY **MON 5V IN**

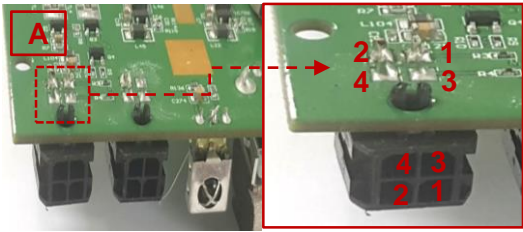
Pin 8 : BUTTON KEY
Pin 10 : MON 5V IN



| Wire | Color |
|---------|----------------|
| CAN H | Violet / White |
| CAN L | Violet / Mint |
| Battery | Red |
| Ground | Black / Mint |

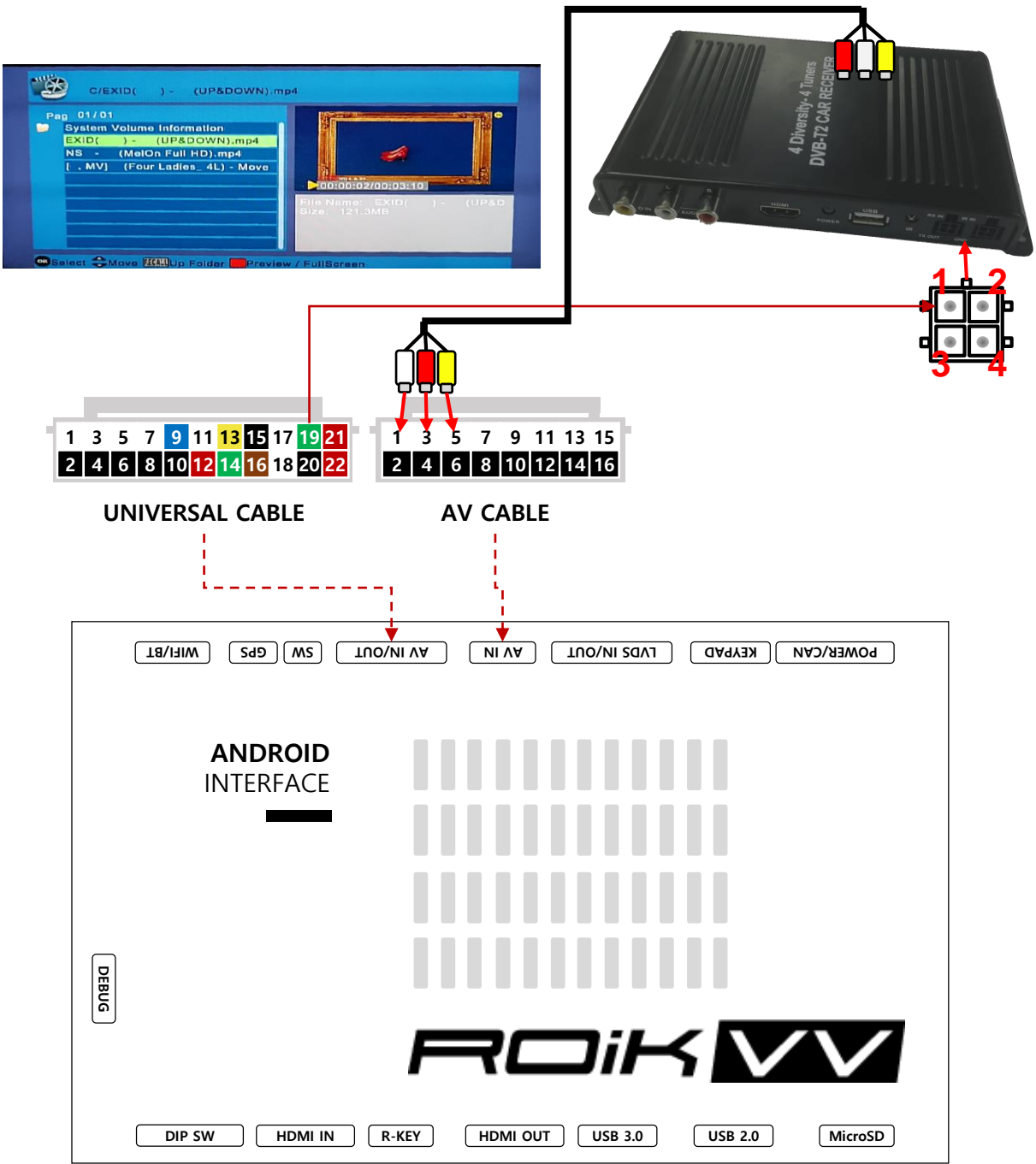


DVB-T CONNECTION DIAGRAM FOR AV INPUT



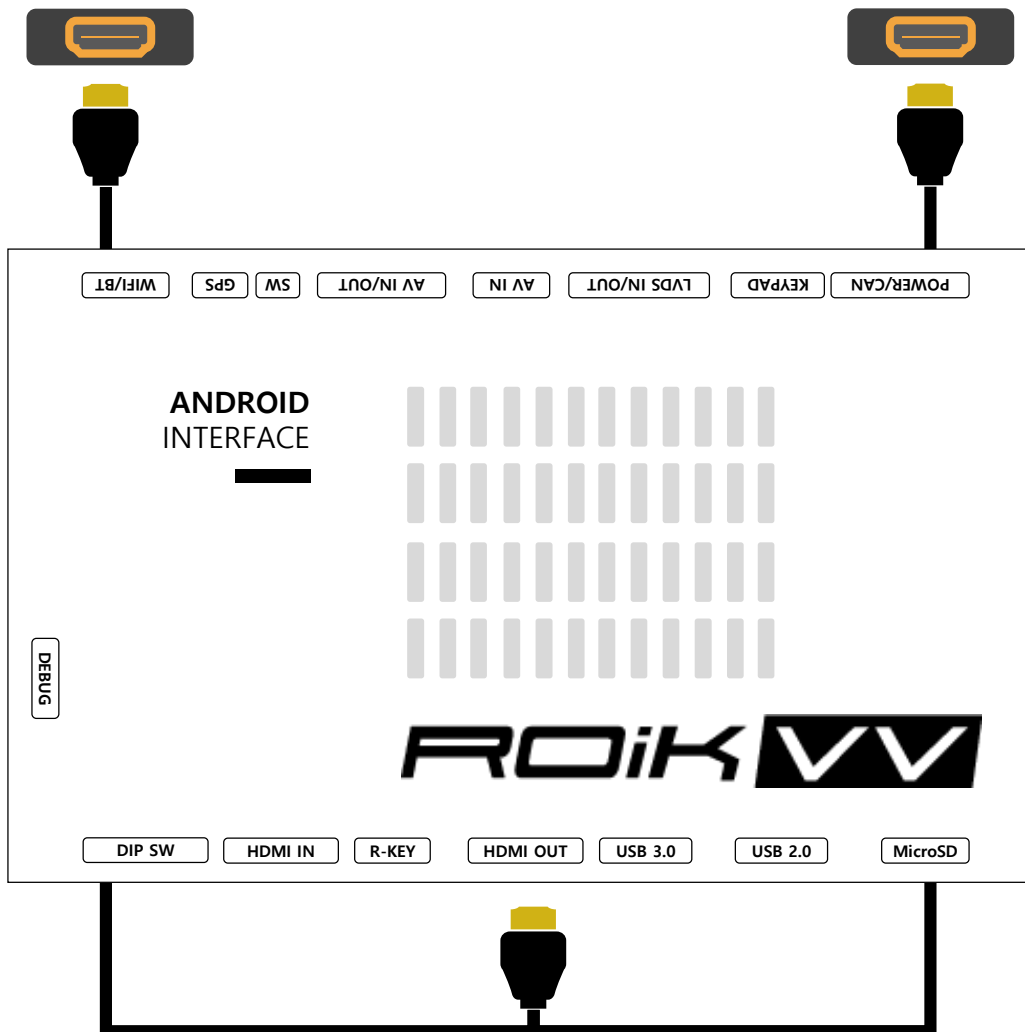
Open the cover of DVB-T.
Connect 'DVBT-IR' provided to 'A' on picture

| | |
|---|-------------|
| 1 | IR – DVB-T |
| 2 | DO NOT USE. |
| 3 | DO NOT USE. |
| 4 | DO NOT USE. |



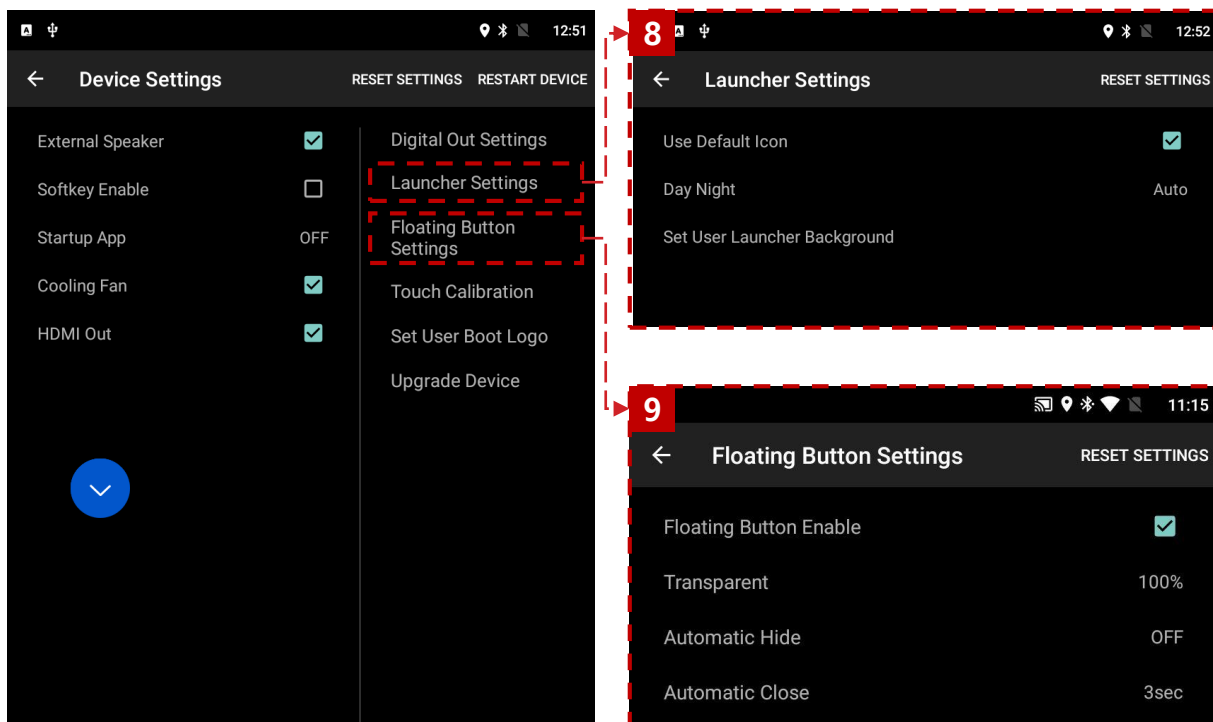
HEADREST MONITOR

※ Headrest Monitor (HDMI Out)



When connecting two or more monitors, An additional HDMI Splitter is required.

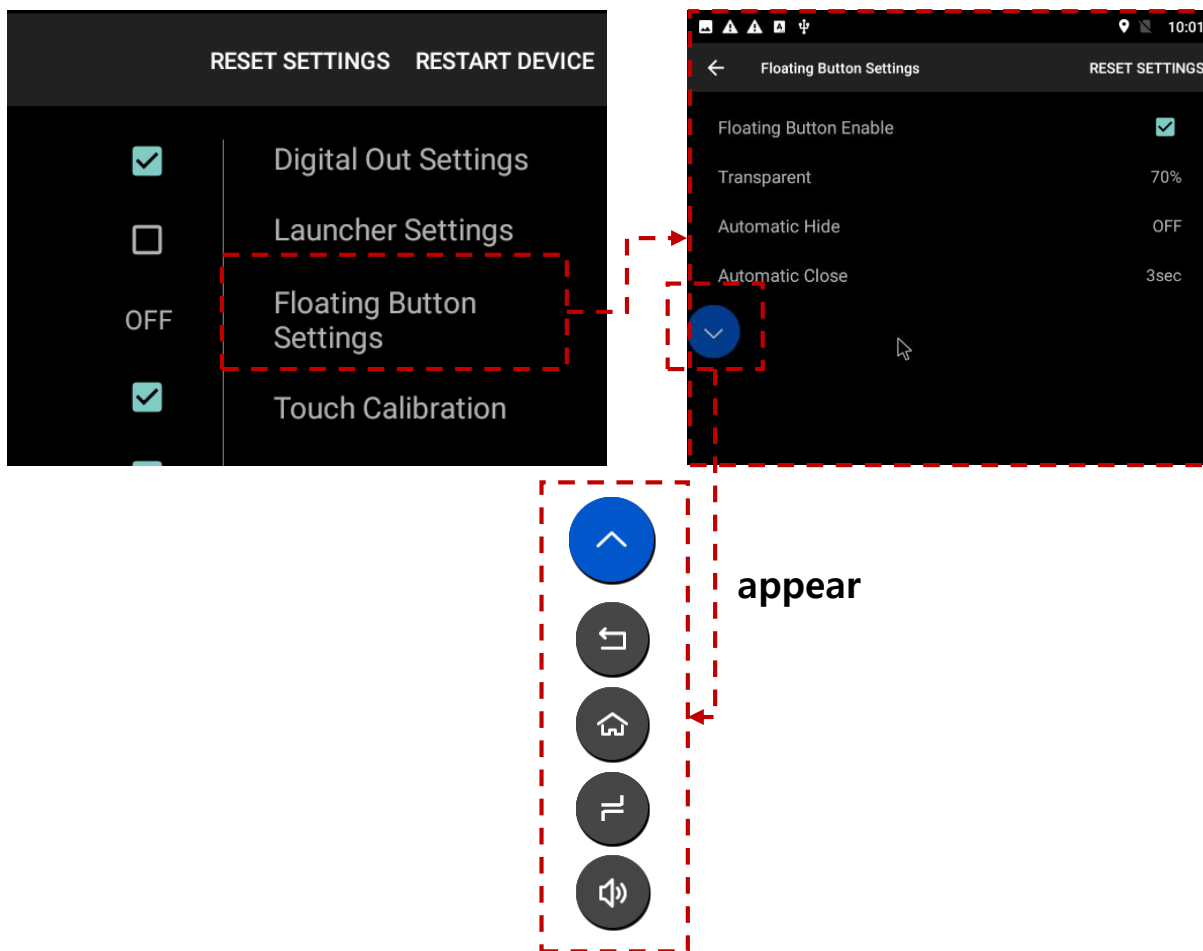
DEVICE SETTINGS



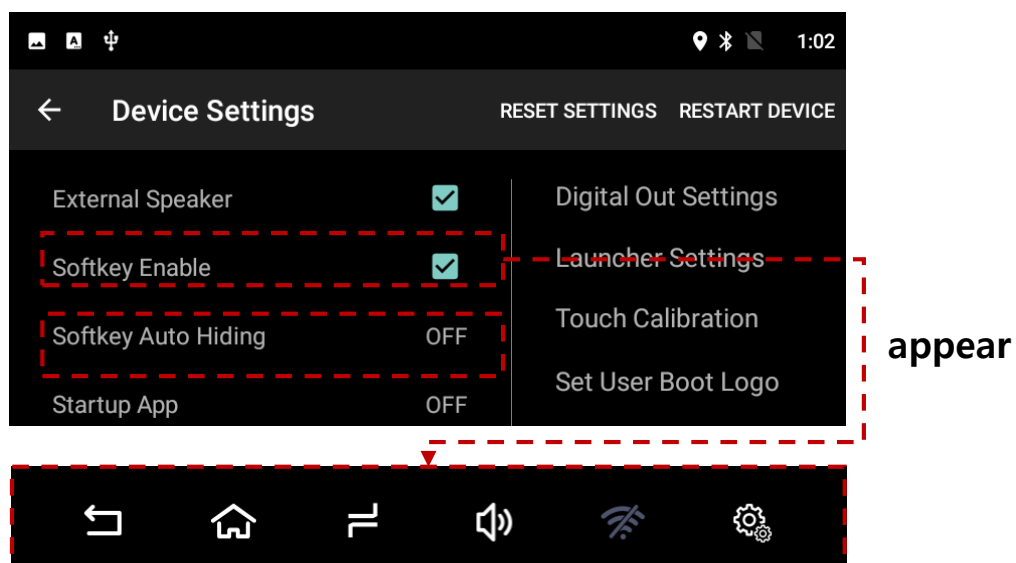
| No. | Button | Function | |
|-----|--------------------------|---|---|
| 1 | RESET SETTINGS | Reset settings to default | |
| 2 | RESET DEVICE | System Reboot | |
| 3 | External Speaker | Turn on/off external speaker | |
| 4 | Softkey Enable | Using or not using soft keys | |
| 5 | Startup App | Select Startup APP | |
| 6 | Cooling Fan | Turn on / off Cooling Fan | |
| 7 | HDMI Out | Turn on / off HDMI Out | |
| 8 | Launcher Settings | Use Default Icon | Set icon of home screen. |
| | | Day Night | select the background of the home screen. |
| | | Set User Launcher Bg | Change the main screen background image (PNG, JPG / 892x1104 pixel) |
| 9 | Floating Button Settings | Floating Button Enable | Using or not using floating button |
| | | Transparent | Adjust the transparency of floating buttons |
| | | Automatic Hide | Floating button auto-hide setting |
| | | Automatic Close | Floating button auto-hide setting time |
| 10 | Touch Calibration | Touch Calibration (for UART Touch) | |
| 11 | Set User Boot Logo | Change boot logo image (PNG, JPG, BMP / 892x1104 pixel) | |
| 12 | Upgrade Device | (Hidden menu) Firmware update is available. (See next page) | |

DEVICE SETTINGS – Floating Button / Softkey Settings

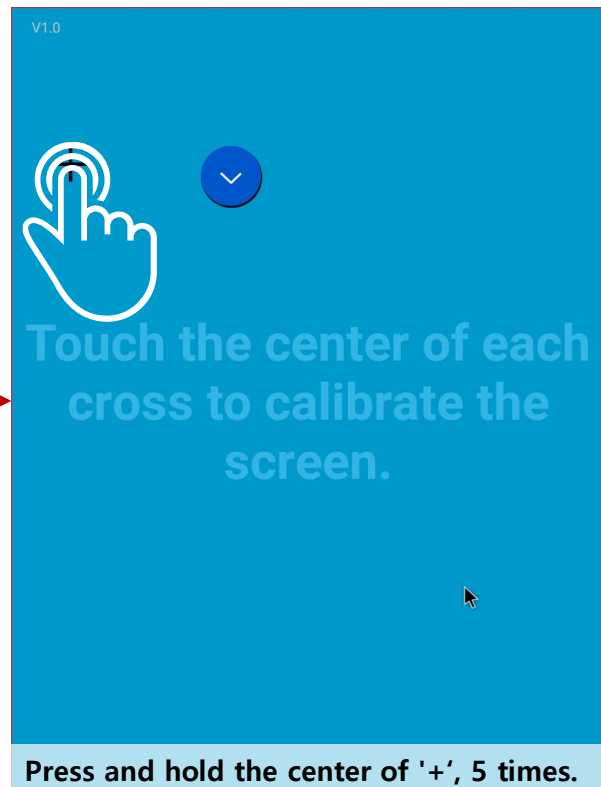
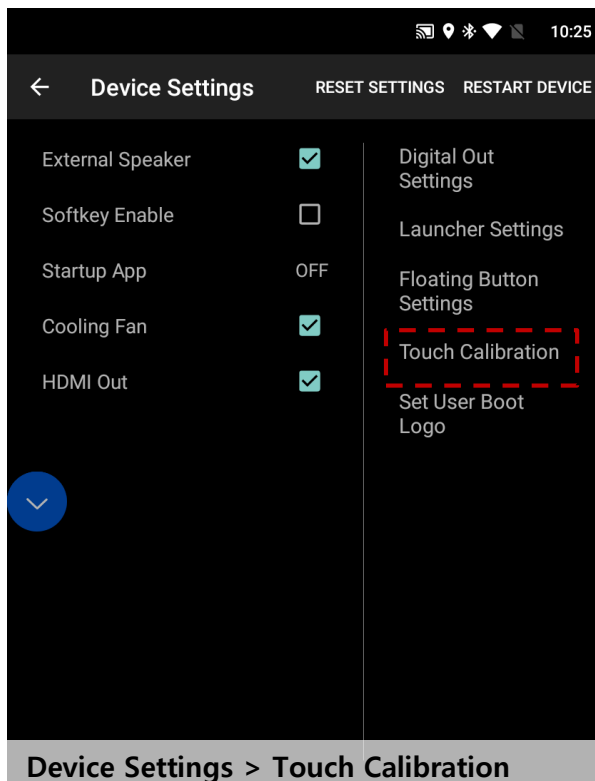
1. Floating Button Use (Disable Softkey)



2. Softkey Use



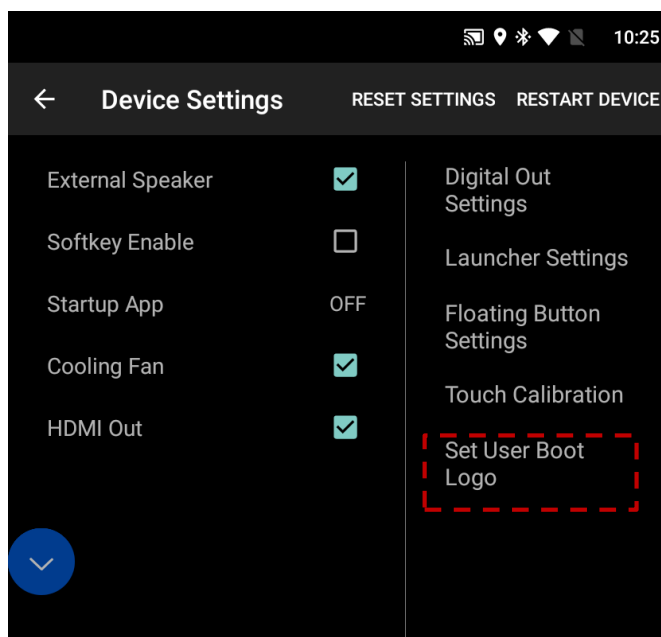
DEVICE SETTINGS – TOUCH CALIBRATION



DEVICE SETTINGS - USER LOGO UPDATE

Set User Boot Logo Activate

1. Device Setting
2. Click 'Set Use Boot Logo' and select boot logo image.

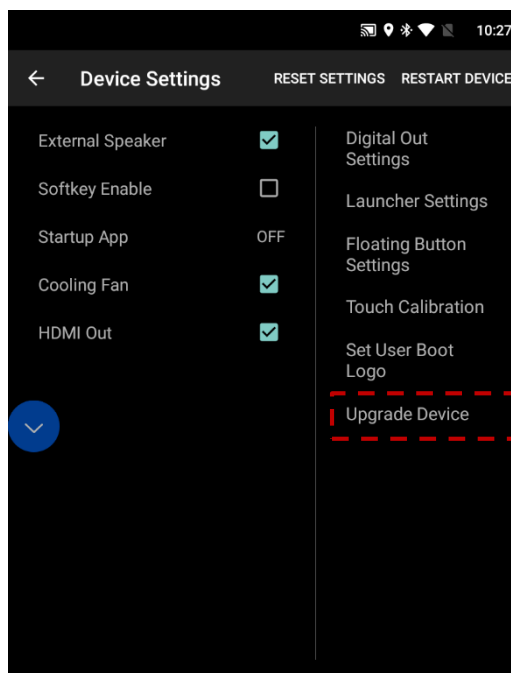


- ※ File Format : PNG, JPG, BMP
- ※ Image Size : 892px X 1104px

FIRMWARE UPGRADE

A

Recommend



Copy 'system_roik10' folder to USB Memory root and insert to USB1 Port.

Select Upgrade Menu, it will start upgrade

*'/usb disk/system_roik10' Folder have 'update.img' file

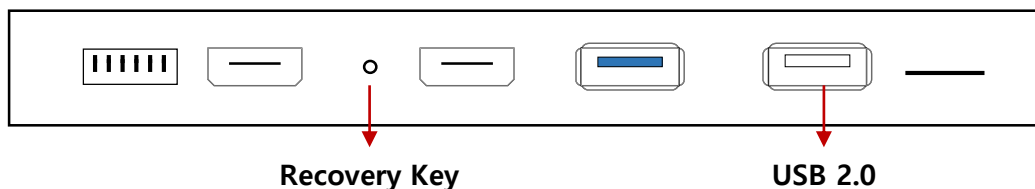
* If there is no update file, "Upgrade Device" menu is not show

※ After firmware update, be sure to perform factory reset to apply the firmware.

※ Update Time will 3~4 min, after first time booting take 3~4 min.

※ USB format type = FAT32 / use on USB1 Port only.

B



Copy 'system_roik10' folder to USB Memory root and insert to USB1.

Push hold "Recovery Key" and turn on (re-connect power cable), it will start upgrade

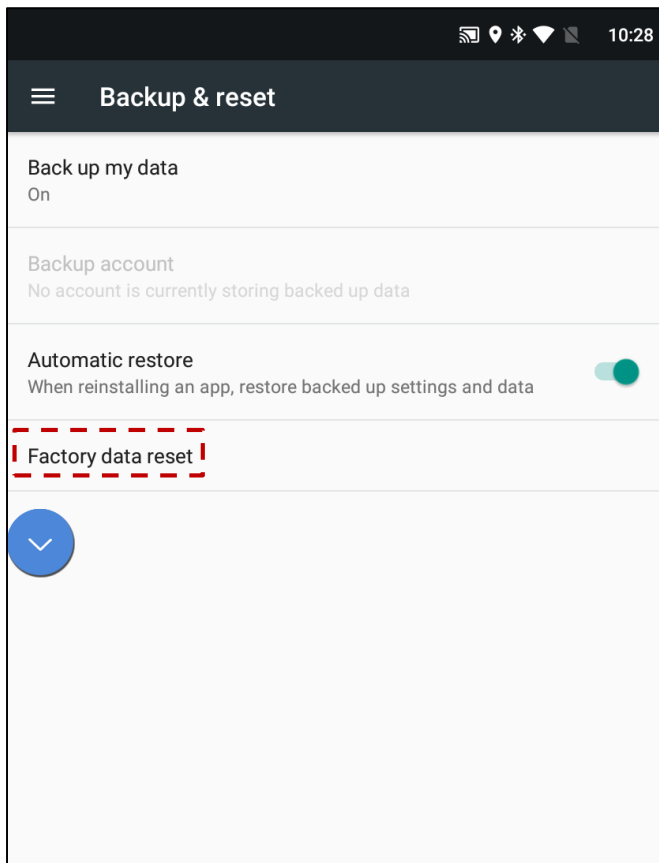
*'/usb disk/system_roik10' Folder have 'update.img' file

※ After firmware update, be sure to perform factory reset to apply the firmware.

※ Update Time will 3~4 min, after first time booting take 3~4 min.

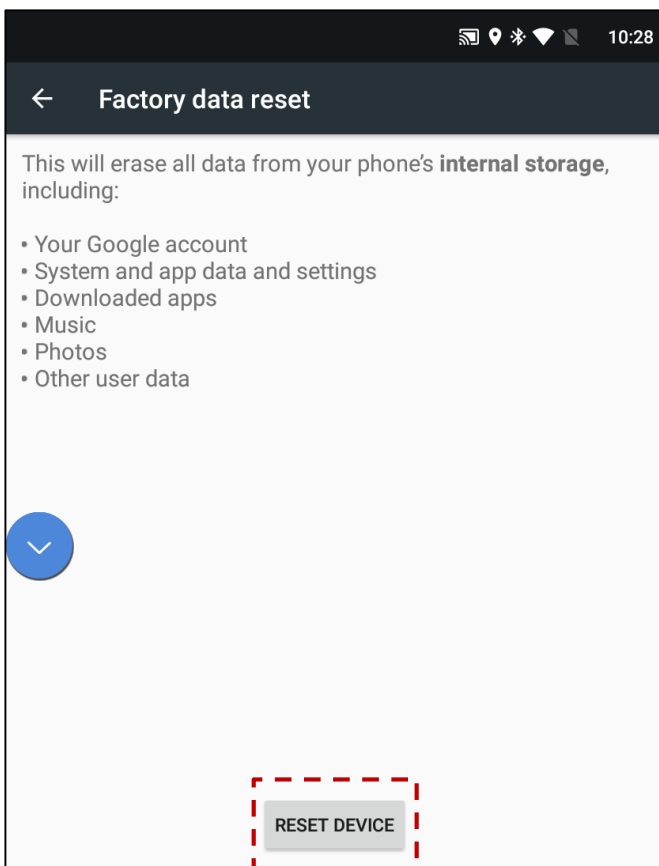
※ USB format type = FAT32 / use on USB1 Port only.

FACTORY RESET



01. Setting

- ▶ Backup & Reset
- ▶ Factory data Reset



02. Select "RESET DEVICE"

= Factory Reset

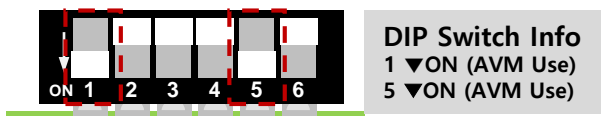
Wait until restart unit

※ After reboot system, it takes 3~4 min

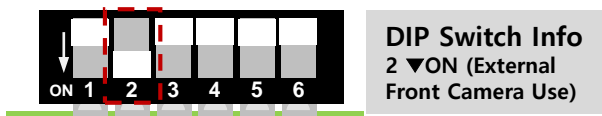
PARKING ASSIST SYSTEM

- Use AfterMarket Camera (No OEM Camera)

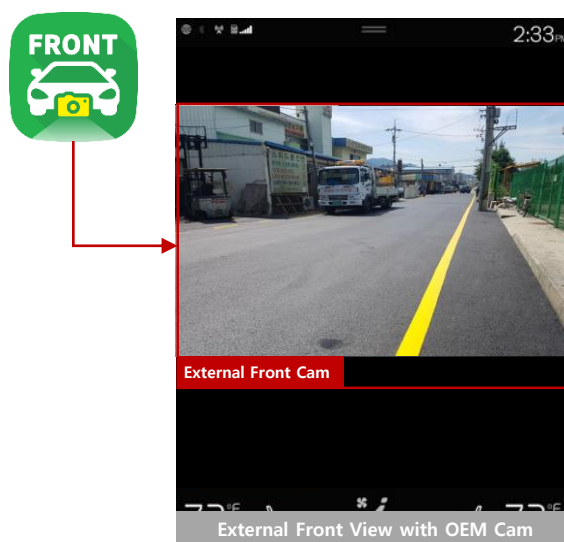
Front View with No OEM Cam (Gear : P / N / D)



When you set the dip switch, the "AVM" app icon is created on the ROIK screen.

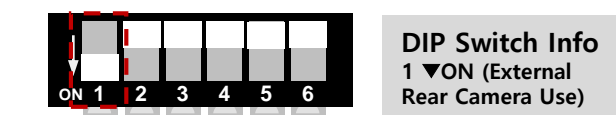
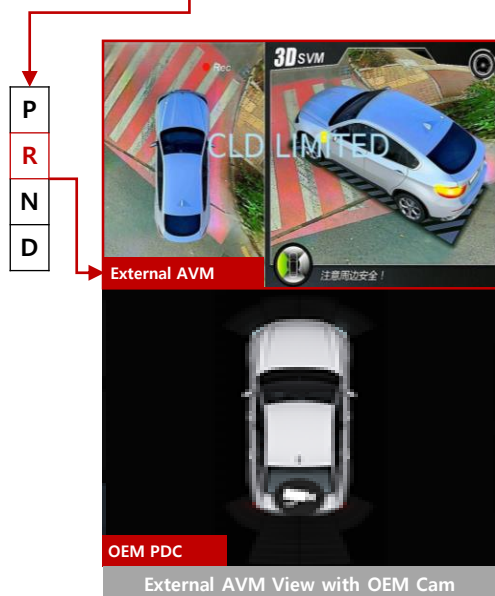
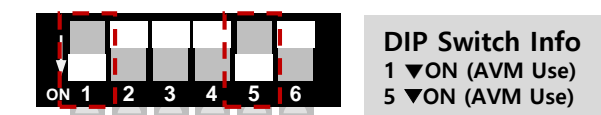


When you set the dip switch, the "Front" app icon is created on the ROIK screen.



※ To return to the ROIK screen, press the Home button on the OEM.

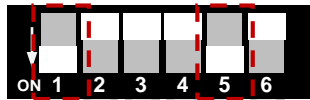
Rear View with No OEM Cam (Gear : R)



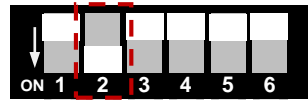
PARKING ASSIST SYSTEM

- Use AfterMarket Camera + OEM Camera

Front View with OEM Cam (Gear : P / N / D)



DIP Switch Info
1 ▼ON (AVM Use)
5 ▼ON (AVM Use)



DIP Switch Info
2 ▼ON (External
Front Camera Use)

When you set the dip switch, the "AVM" app icon is created on the ROIK screen.

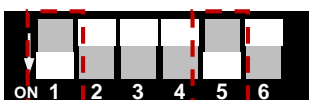


When you set the dip switch, the "Front" app icon is created on the ROIK screen.

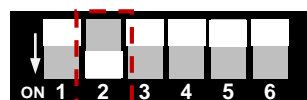


※ To return to the ROIK screen, press the Home button on the OEM.

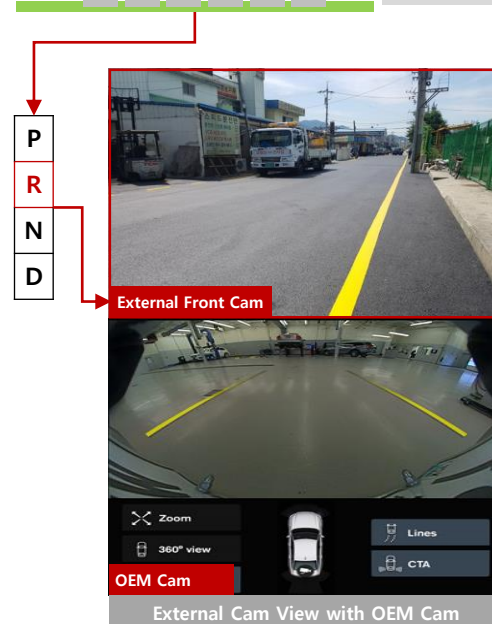
Rear View with OEM Cam (Gear : R)



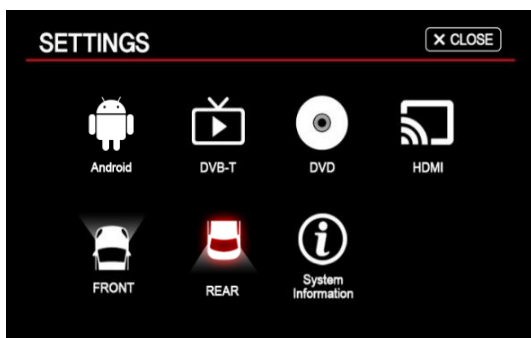
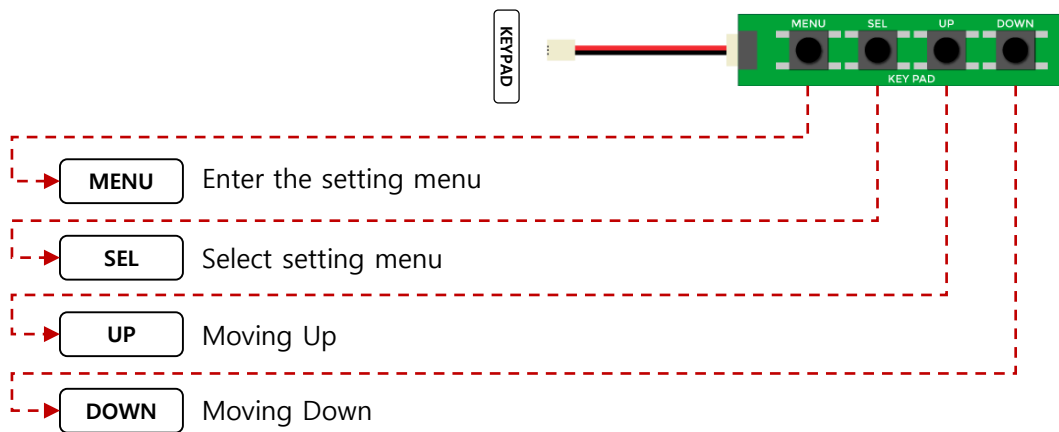
DIP Switch Info
1 ▼ON (AVM Use)
5 ▼ON (AVM Use)



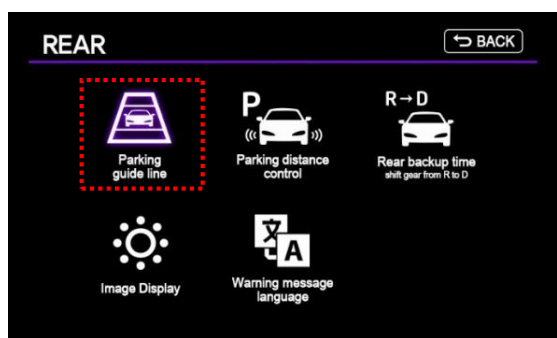
DIP Switch Info
2 ▼ON (External
Front Camera Use)



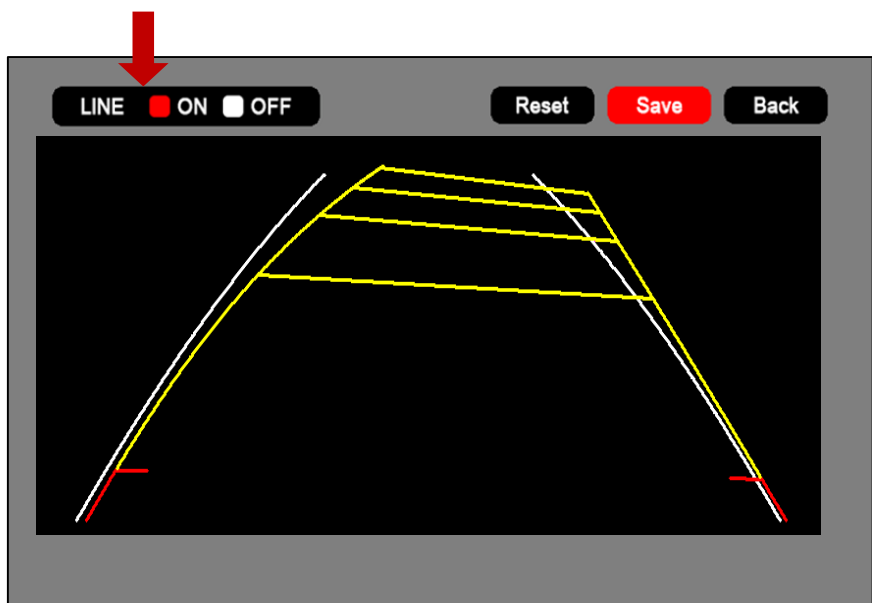
USE PAS-LINE SETTING



Select "REAR"

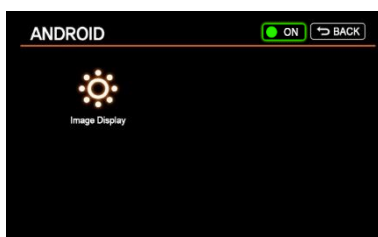
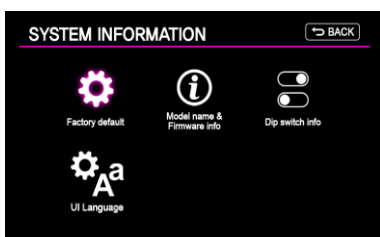
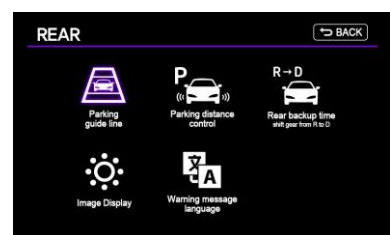
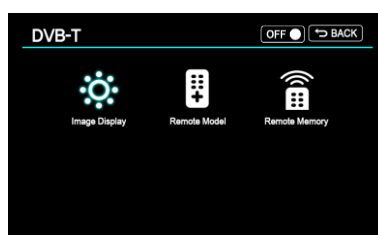
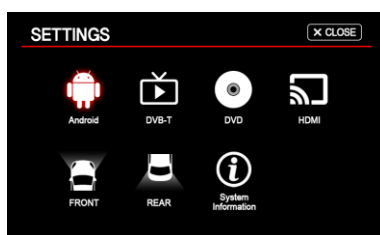
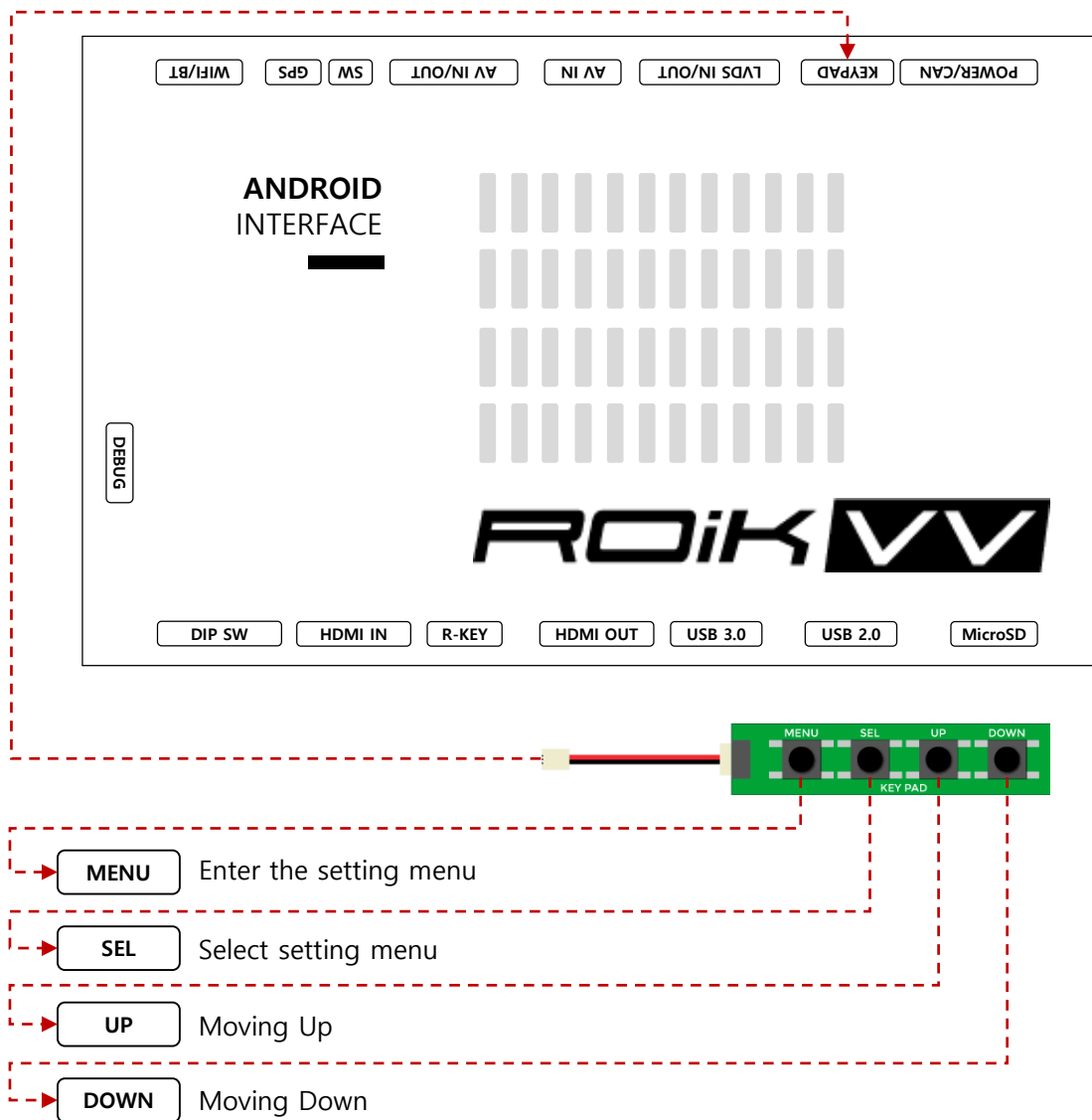


Select "Parking guide line"

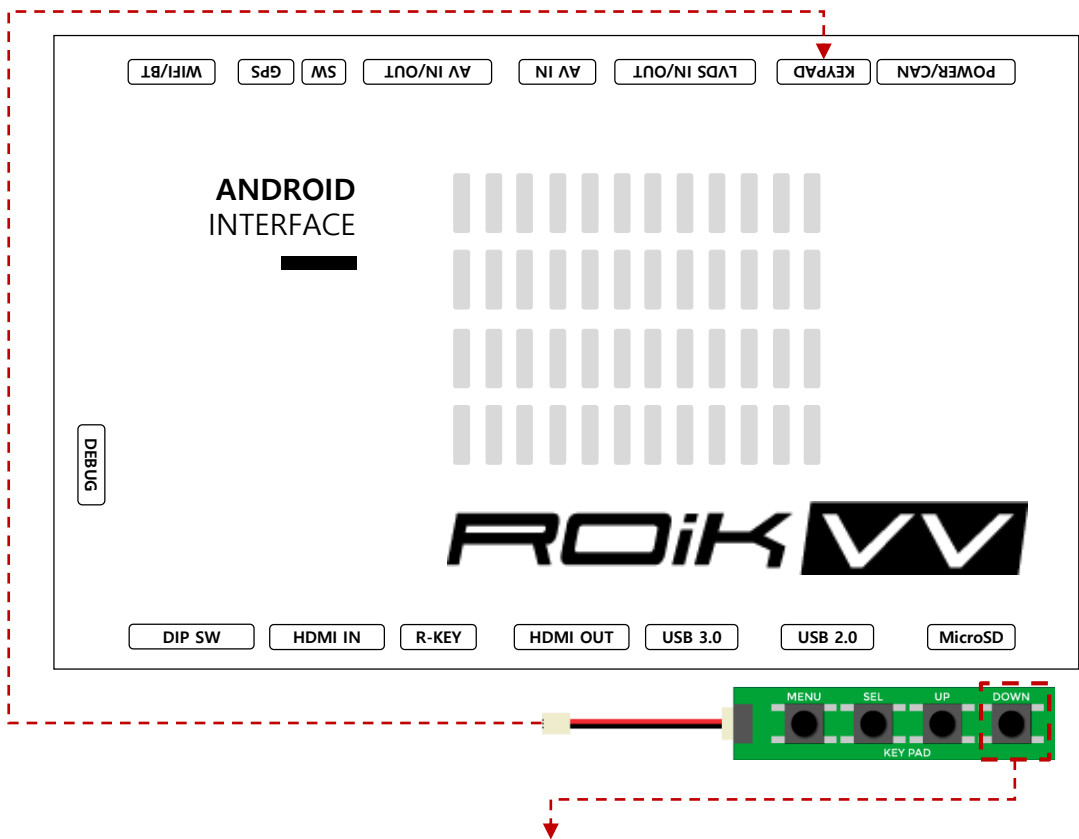


To use pas line, you can use it after selecting line on the setting screen

INTERFACE SETTING



QUICK INFO



To Enter Quick Info.

1. Press Menu Button to change oem screen to Interface screen.
2. Press **Down Button** in the interface screen for 3 seconds.

QUICK INFO.

Firmware Info.

Main : 2017 - 08 - 30
Sub : 2017 - 08 - 30
TW8823 : 2017 - 08 - 30

CAN DATA

GEAR : AC MW GZ 01 57 89 89 89
STEER REMOTE : FF FF FF FF FF FF FF FF
PAS : FF FF FF FF FF FF FF FF
PDC : FF FF FF FF FF FF FF FF
BUTTON : FF FF FF FF FF FF FF FF

| PIN | DIP S/W Selection |
|-----|---------------------------------|
| 1 | ON <input type="checkbox"/> OFF |
| 2 | ON <input type="checkbox"/> OFF |
| 3 | ON <input type="checkbox"/> OFF |
| 4 | ON <input type="checkbox"/> OFF |
| 5 | ON <input type="checkbox"/> OFF |
| 6 | ON <input type="checkbox"/> OFF |
| 7 | ON <input type="checkbox"/> OFF |
| 8 | ON <input type="checkbox"/> OFF |
| 9 | ON <input type="checkbox"/> OFF |
| 10 | ON <input type="checkbox"/> OFF |

Quick Info Screen



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