Instruction Manual

2018 NEW

ANDROID INTERFACE

DATE.
2018.11.02

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℃ ~ 80℃
Operating	-15℃ ~ 70℃

※ 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
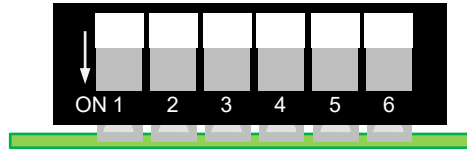
Pin No.	On	Off
1	**External Rear Camera Or Using 360 AVM**	**Orignal Rear Camera**
2	**External Front Camera**	**Skip External Front Camera**
3	**No Function**	
4	**IR for ASUKA Touch**	**IR for Remote Controller**
5	**Using 360 AVM**	**360 AVM not used**
6	**Selection of Car Model (Only Off)**	

※ **Selection of Car Model**

6	Car Model
Off	VOLVO

DIP S/W INFORMATION
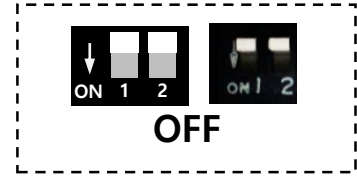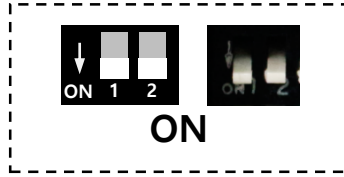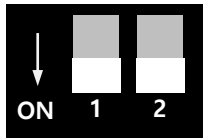
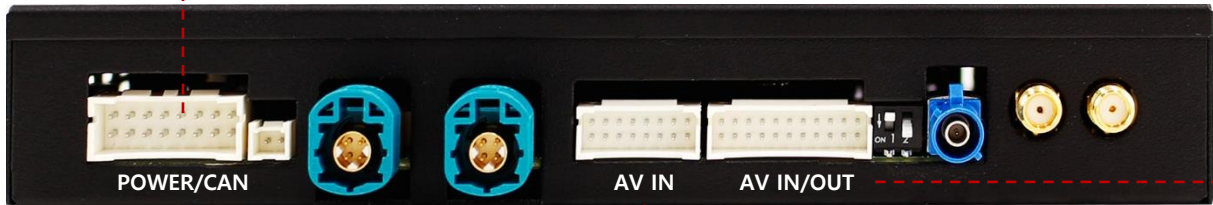| Pin No.	On	Off
1	NC	NC
2	Use External GPS Antenna (DIP S/W 2 Must ON)	Use Car GPS Cable (Option)

CONNECTOR PIN ASSIGNMENT

Power Cable (POWER/CAN)

1	3	5	7	9	11	13	15
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
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
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
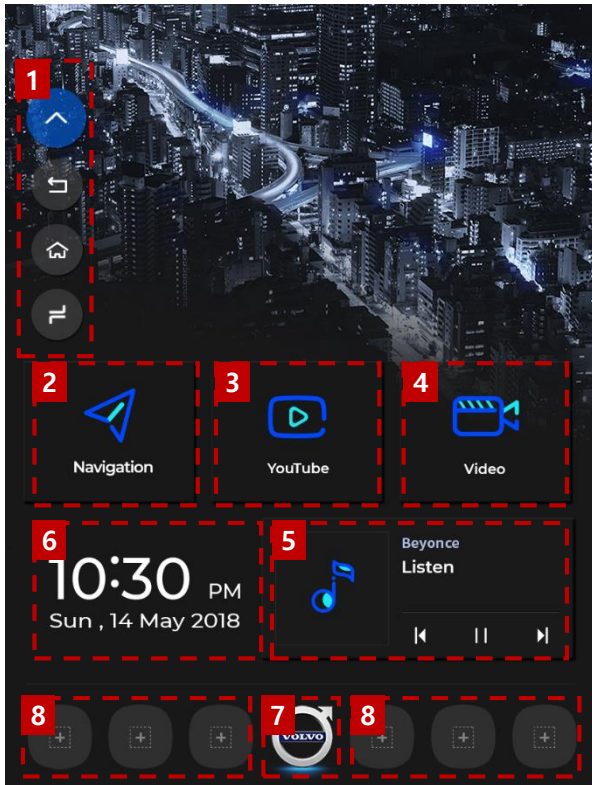
Main Screen
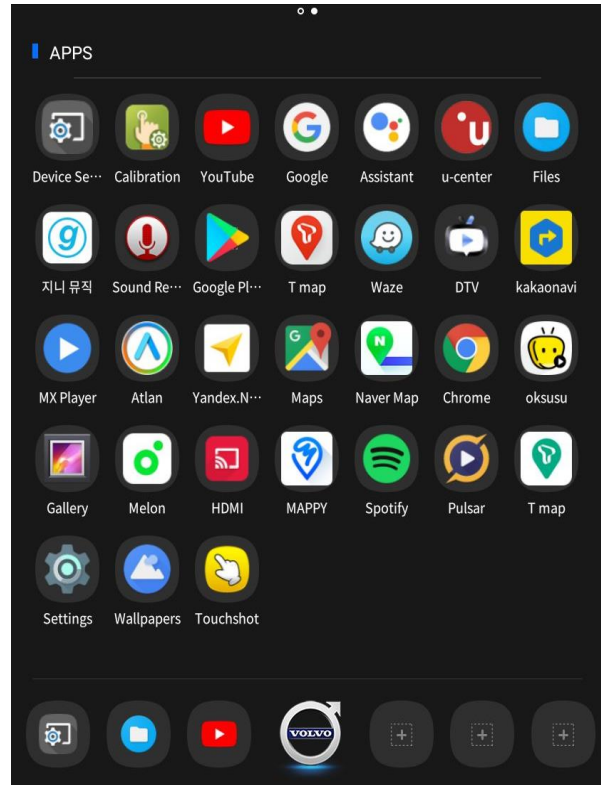
Apps Screen

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
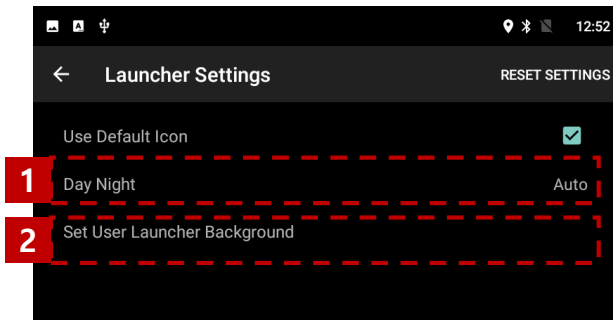
1. background is automatically converted to the actual time change.
(Can be set in device settings > Launcher Settings)
① Automatic / ② Set to Day background image / ③ Set to Night background image

2. Alternatively, you can change the background to another image.
(PNG, JPG / 892x1104 pixel)
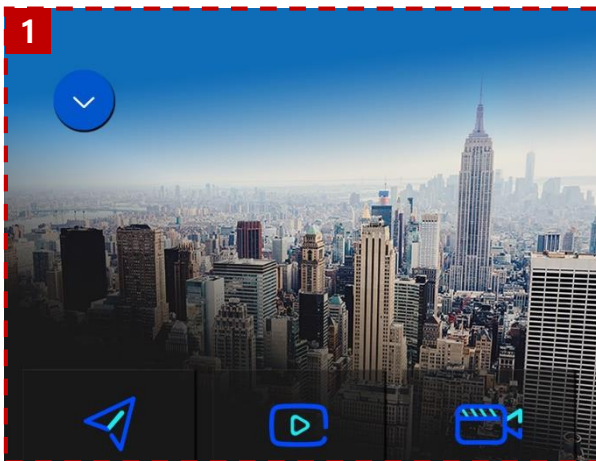
Day Screen
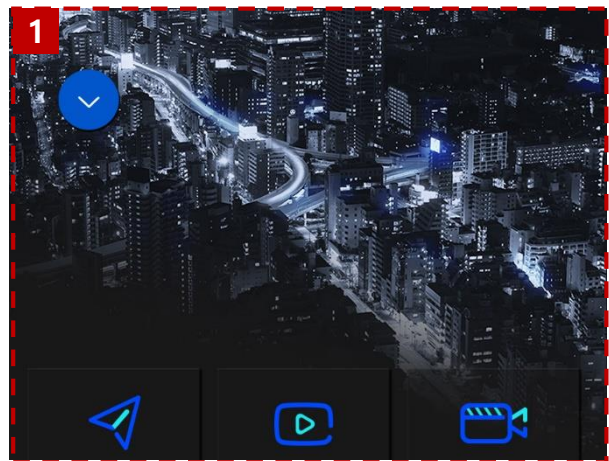
Night Screen

Your image
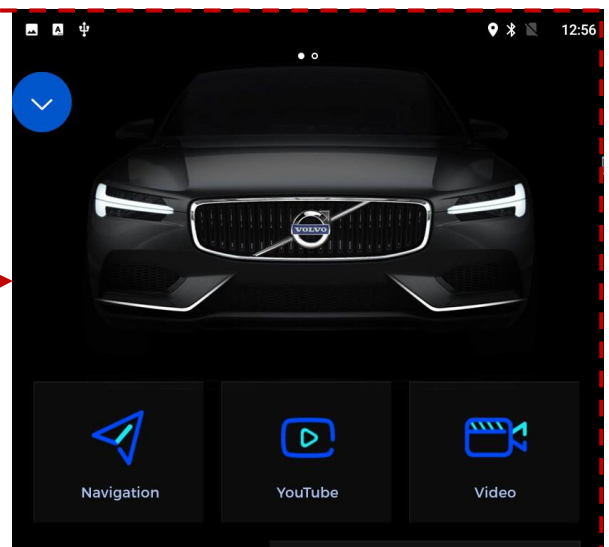
Apply as background

SCREEN VIEW – Split Screen Mode

 Long Press

**Normal
Mode**

Split Screen Mode

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1. Multitasking button Long press
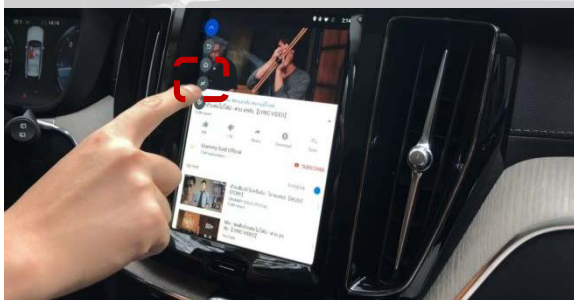
2. Press Home button in Split Screen Mode
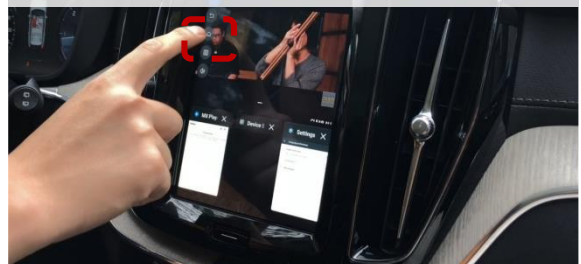
3. Select application
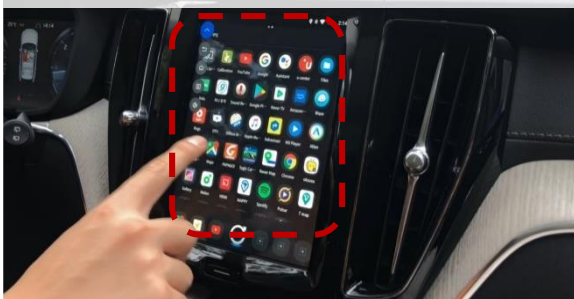
4. Enjoy Split Screen Mode
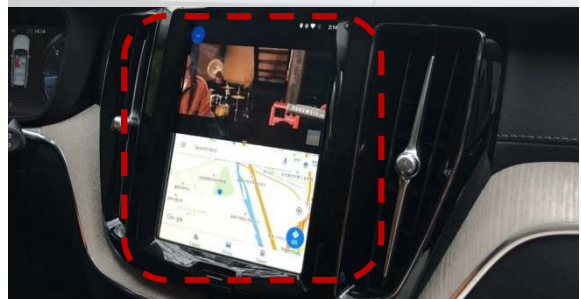
※ **Some apps are not work on Split Screen Mode mode**

CONNECT CAN/POWER DIAGRAM

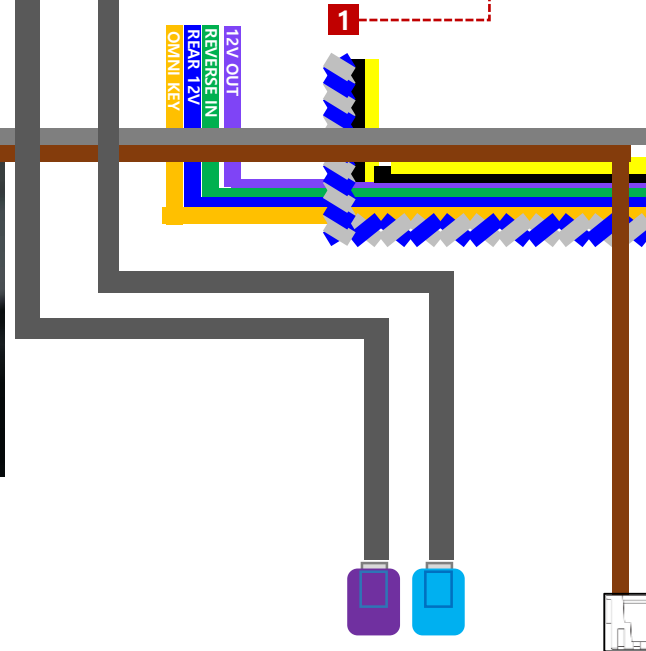1. Connect CAN, BAT, GND to wire between car body and passenger's door

passenger's door
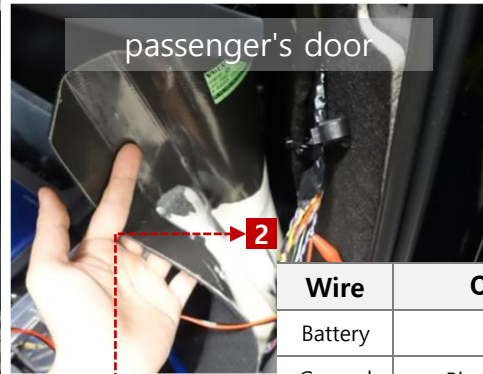
Wire	Color
Battery	Red
Ground	Black / Mint

BUTTON KEY
MON 5V IN

OMNI KEY
REAR 12V
REVERSE IN
12V OUT
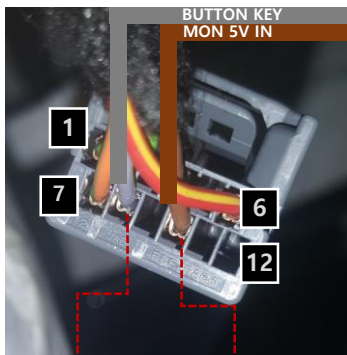
BUTTON KEY   MON 5V IN

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

Wire	Color
CAN H	Violet / White (p5)
CAN L	Violet / Green (p4)

WIFI/BT · GPS · SW · AV IN/OUT · AV IN · LVDS IN/OUT · KEYPAD · POWER/CAN

ANDROID
INTERFACE

DEBUG

ROiK VV

DIP SW · HDMI IN · R-KEY · HDMI OUT · USB 3.0 · USB 2.0 · MicroSD
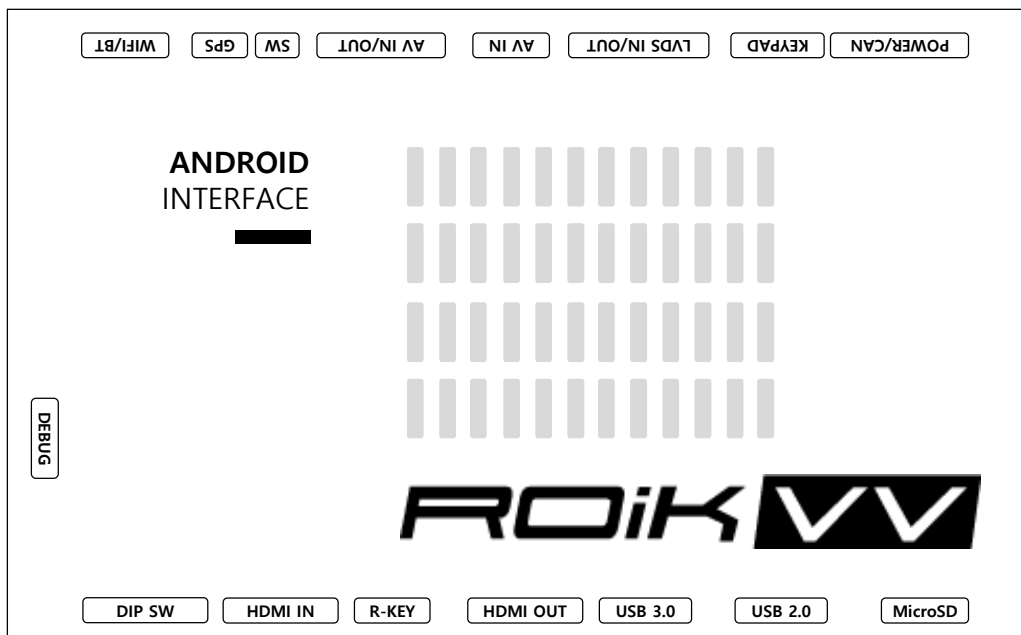
DVB-T CONNECTION DIAGRAM FOR AV INPUT

Open the cover of DVB-T.
Connect 'DVBT-IR' provided to 'A' on picture
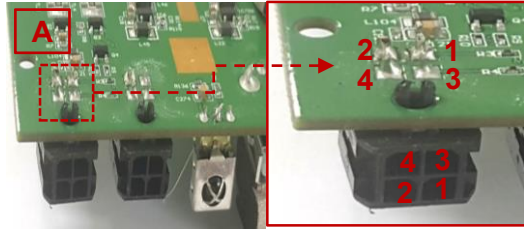
1	IR – DVB-T
2	DO NOT USE.
3	DO NOT USE.
4	DO NOT USE.

UNIVERSAL CABLE   AV CABLE

ANDROID
INTERFACE

DEBUG

ROiK VV

DIP SW   HDMI IN   R-KEY   HDMI OUT   USB 3.0   USB 2.0   MicroSD
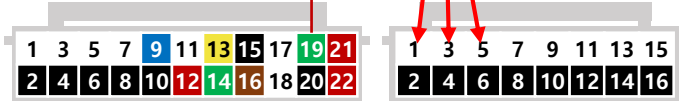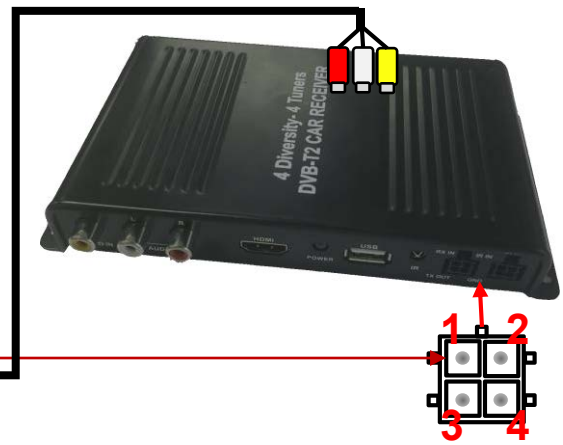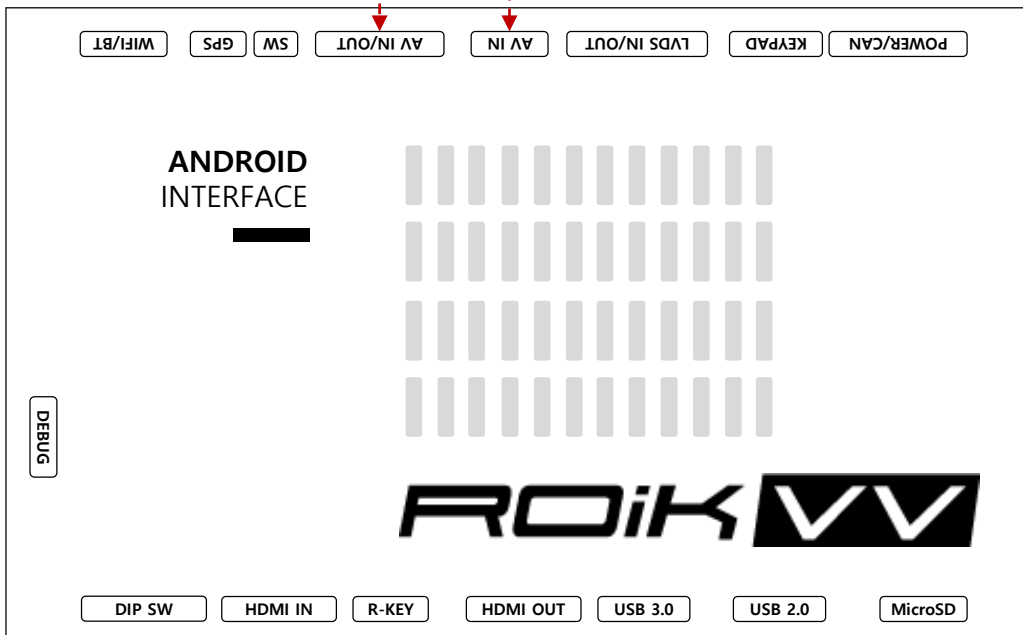
HEADREST MONITOR

※ Headrest Monitor (HDMI Out)

HDMI   HDMI

WIFI/BT | GPS | SW | AV IN/OUT | AV IN | LVDS IN/OUT | KEYPAD | POWER/CAN

ANDROID
INTERFACE

DEBUG

ROiK VV

| DIP SW | HDMI IN | R-KEY | HDMI OUT | USB 3.0 | USB 2.0 | MicroSD |
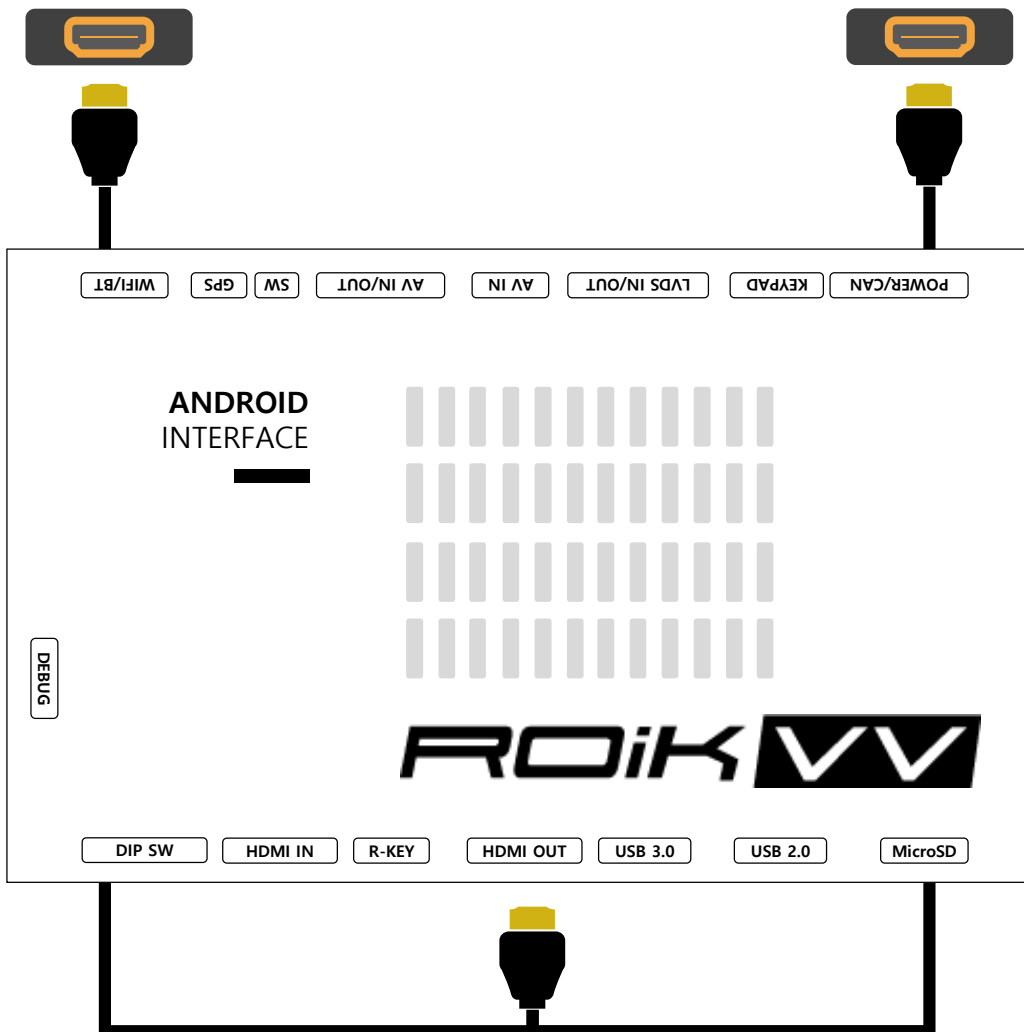
When connecting two or more monitors, An additional HDMI Splitter is required.

DEVICE SETTINGS
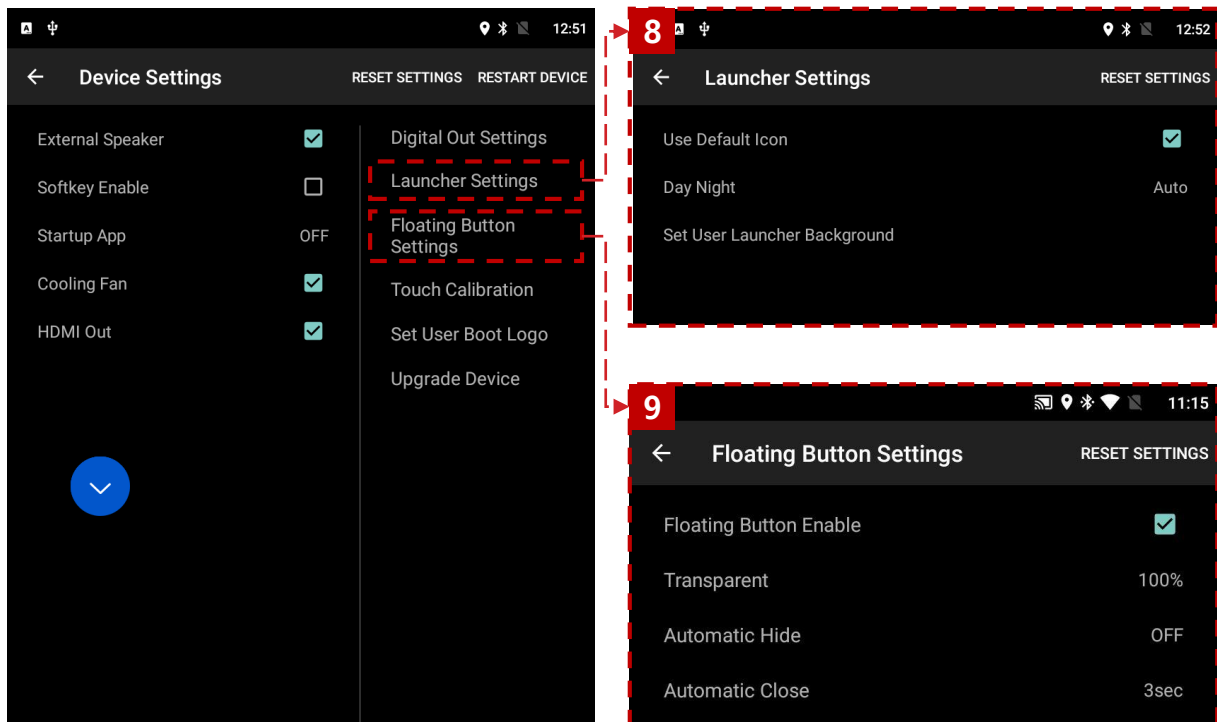
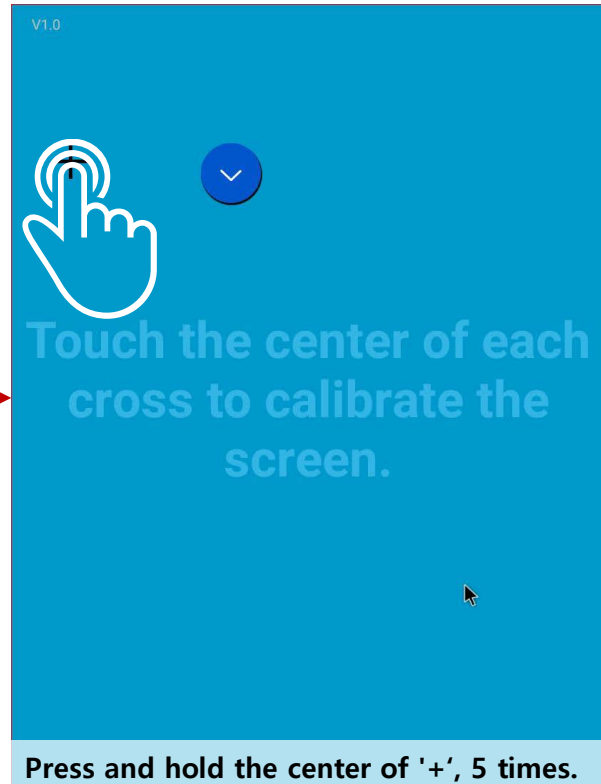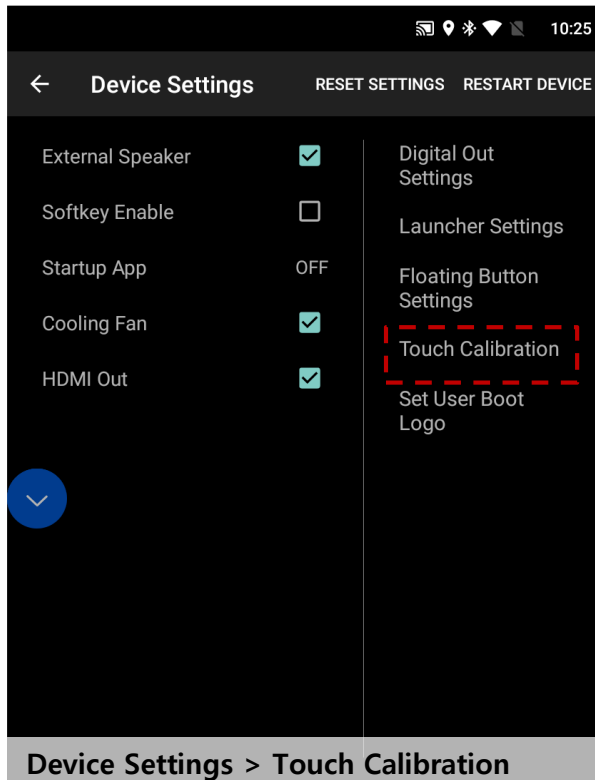| No.	Button	Function	
1	**RESET SETTINGS**	Reset settings to default	
2	**RESET DEVICE**	System Reboot	
3	**External Speaker**	Turn on/off external speaker	
4	**Softkey Enable**	Using or not using soft keys	
5	**Startup App**	Select Startup APP	
6	**Cooling Fan**	Turn on / off Cooling Fan	
7	**HDMI 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 Enble**	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
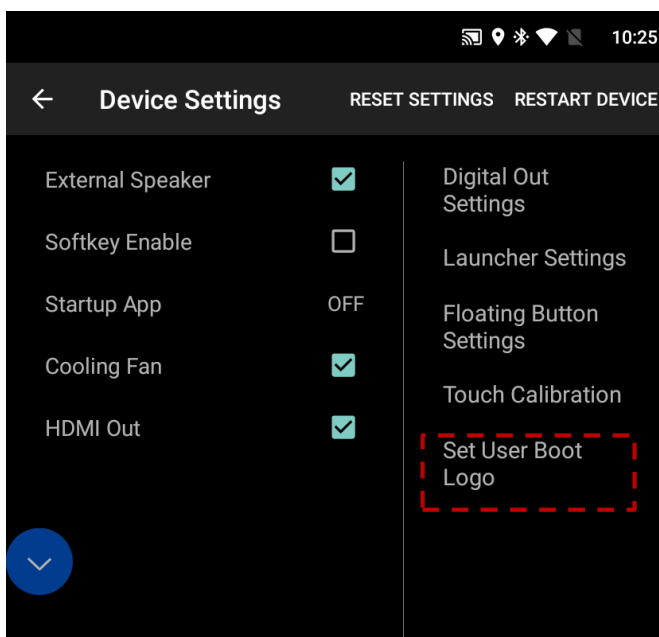
1. Floating Button Use (Disable Softkey)

appear

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2. Softlkey Use

appear
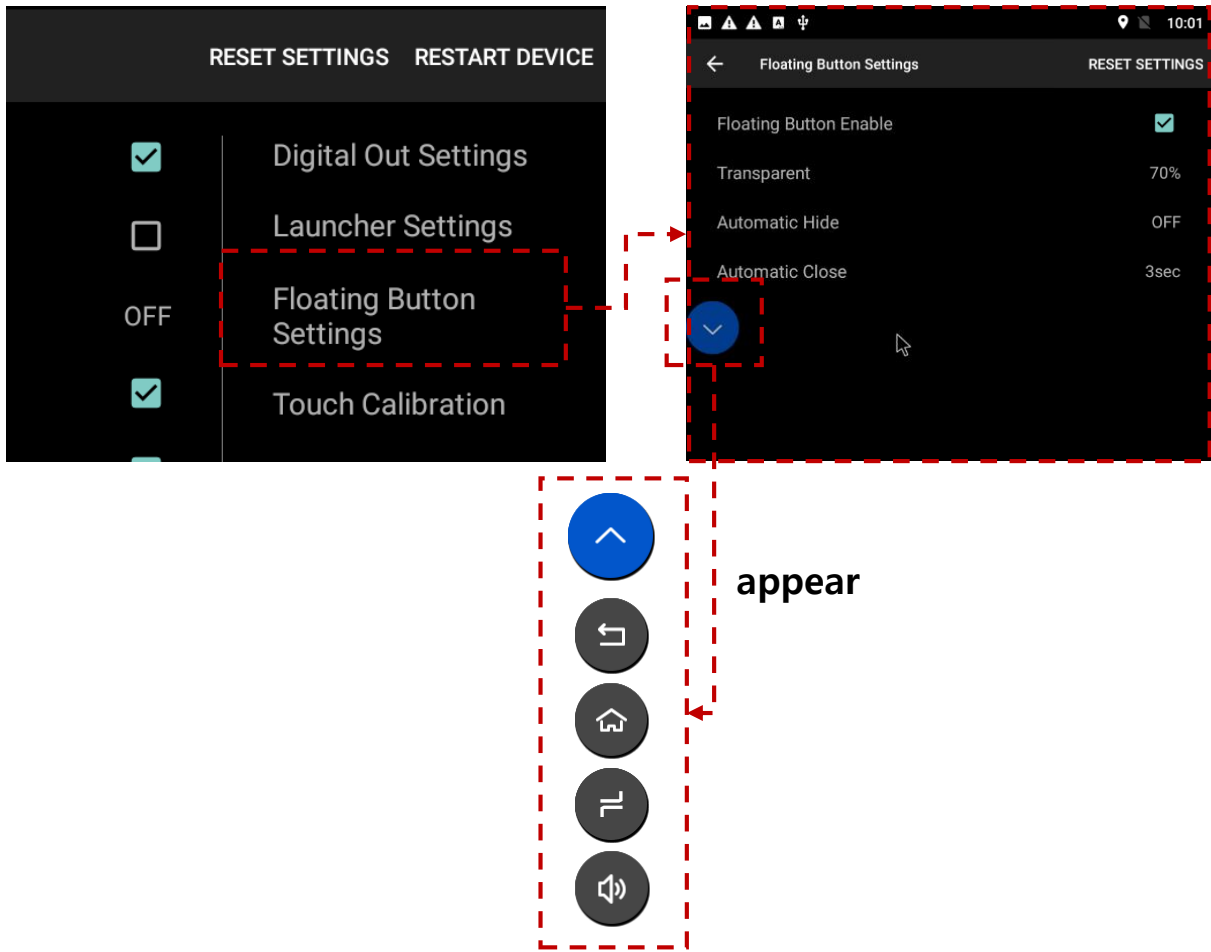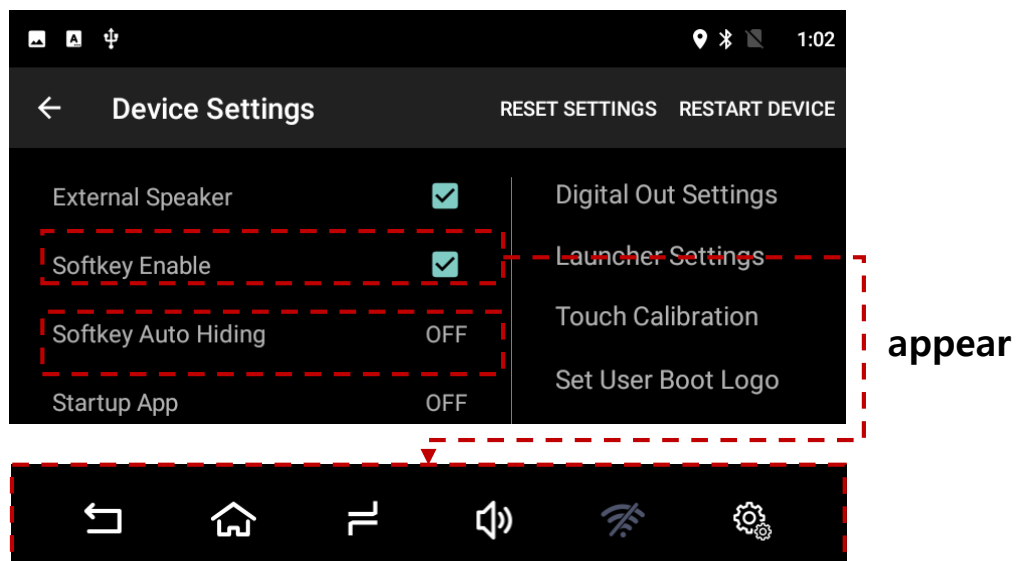
DEVICE SETTINGS – TOUCH CALIBRATION

Device Settings > Touch Calibration

Touch the center of each cross to calibrate the screen.

Press and hold the center of '+', 5 times.

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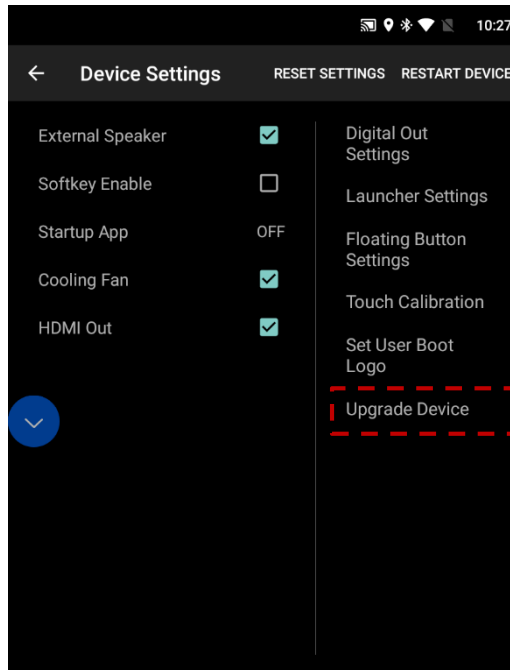
Copy 'system_roik10' folder to USB Memory root and insert to USB1 Port.

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

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

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

B
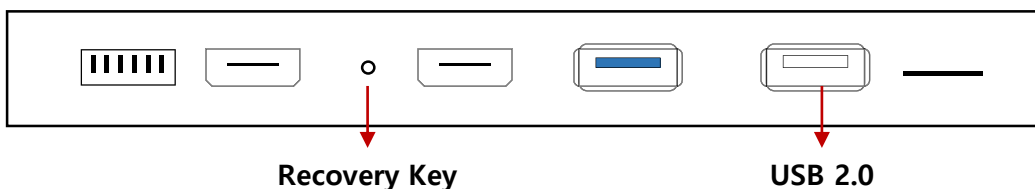
Recovery Key   USB 2.0

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

 ※ 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
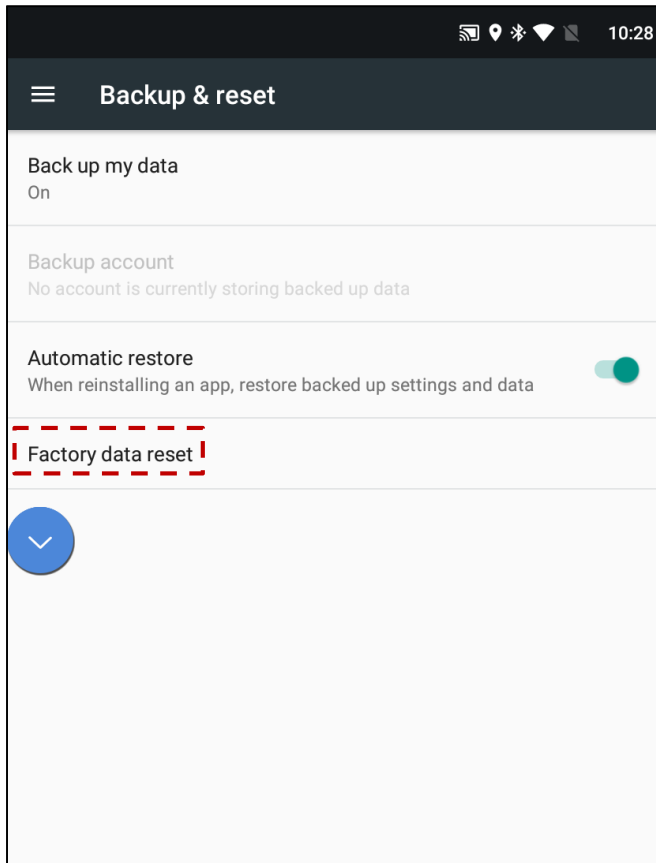
01. Setting

▶ **Backup & Reset**

▶ **Factory data Reset**
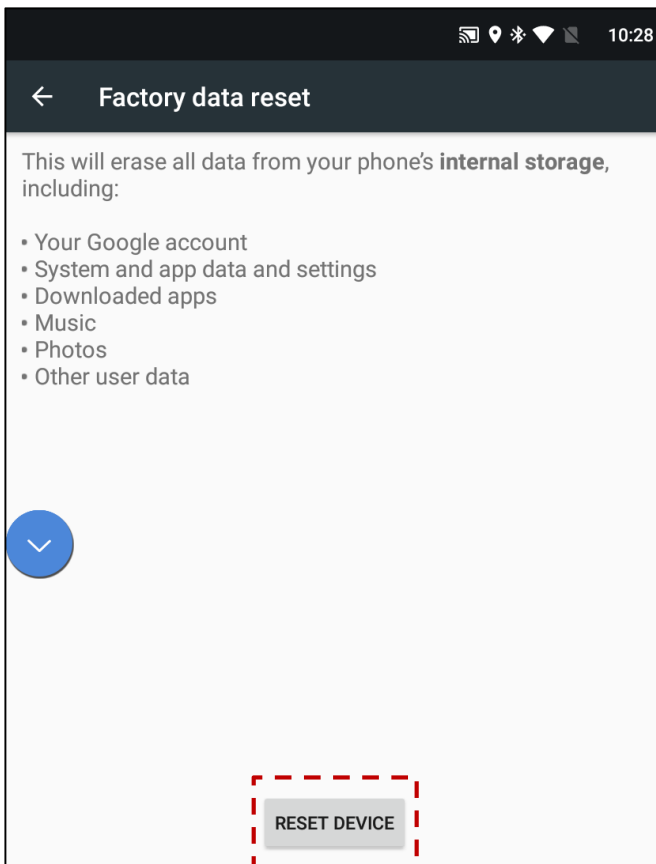
02. Select "RESET DEVICE"

= Factory Reset

Wait until restart unit

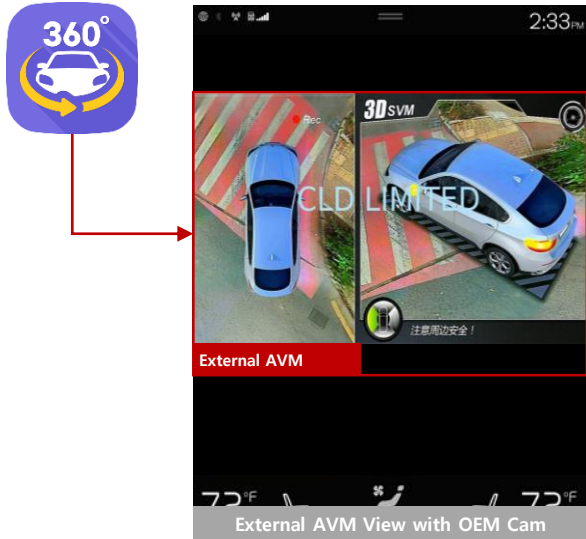※ **After reboot system, it takes 3~4 min**

PARKING ASSIST SYSTEM – NO OEM CAMERA
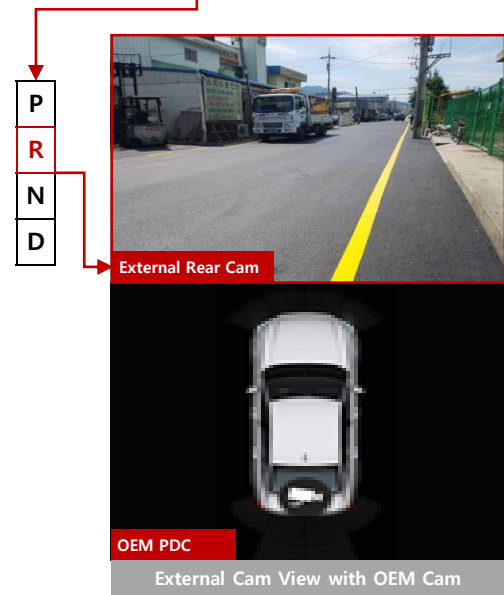
Front View with No OEM Cam (Gear : P / N / D)

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

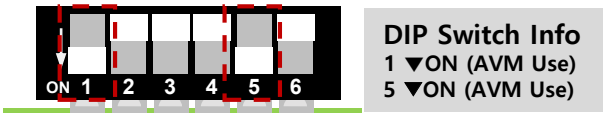**DIP Switch Info**
2 ▼ON (External Front Camera Use)
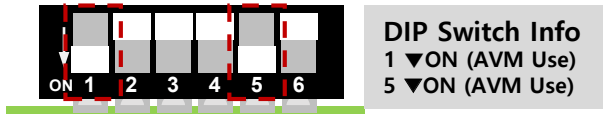
When you set the dip switch, the "AVM" app icon is created on the ROIK screen.

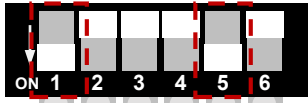When you set the dip switch, the "Front" app icon is created on the ROIK screen.

External AVM

External AVM View with OEM Cam

External Front Cam

External Front View with OEM Cam
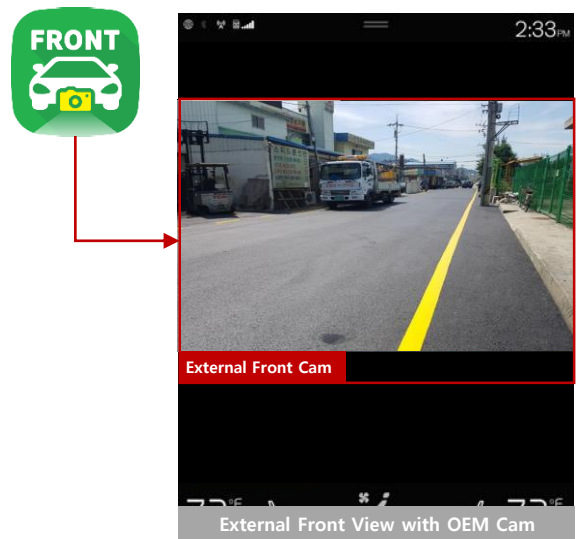
※ **To return to the ROIK screen, press the Home button on the OEM.**

Rear View with No OEM Cam (Gear : R)

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

DIP Switch Info
1 ▼ON (External Rear Camera Use)

P
R
N
D

External AVM

OEM PDC

External AVM View with OEM Cam

P
R
N
D

External Rear Cam

OEM PDC

External Cam View with OEM Cam
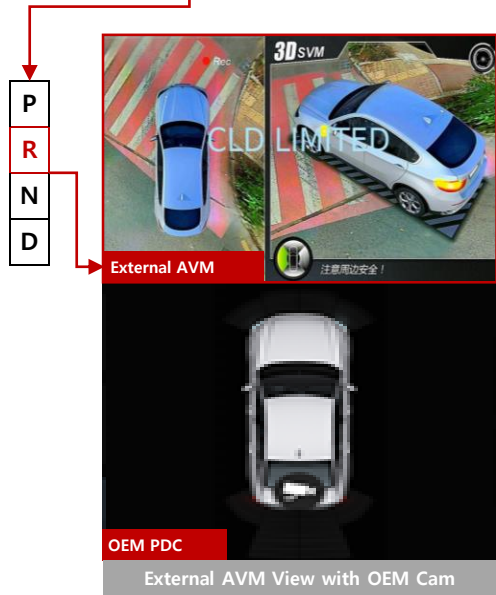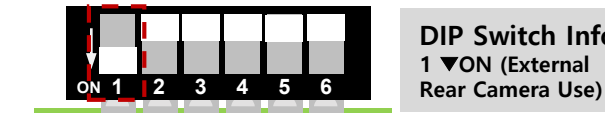
PARKING ASSIST SYSTEM - OEM CAMERA

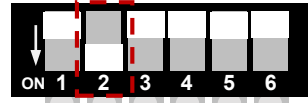## Front View with OEM Cam (Gear : P / N / D)

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

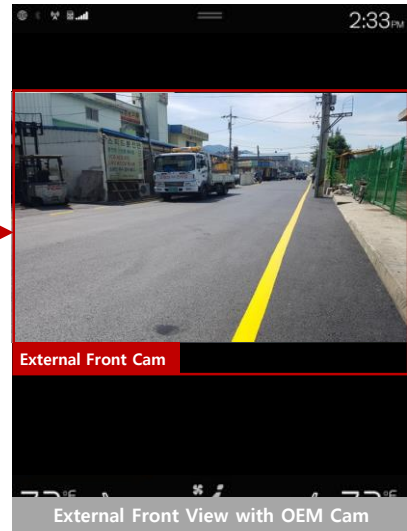**When you set the dip switch, the "AVM" app icon is created on the ROIK screen.**

External AVM

External AVM View with OEM Cam

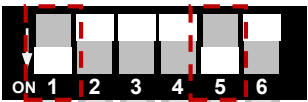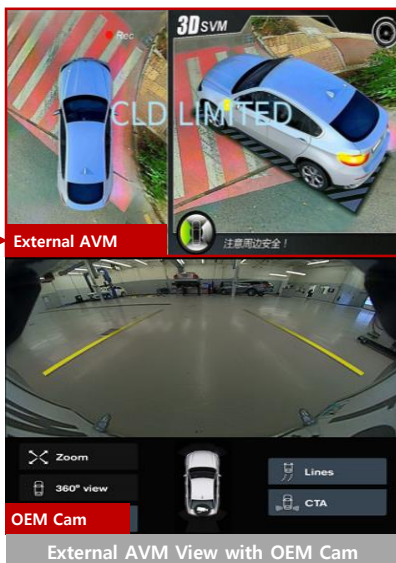**DIP Switch Info**
2 ▼ON (External Front Camera Use)

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

External Front Cam

External Front View with OEM Cam

※ 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)
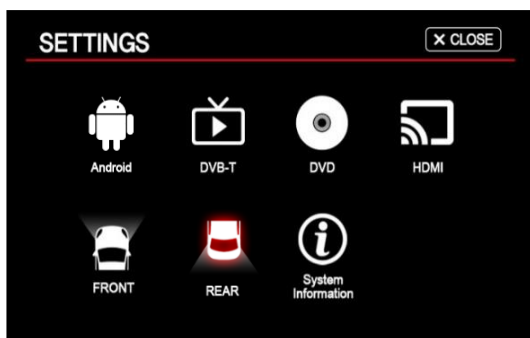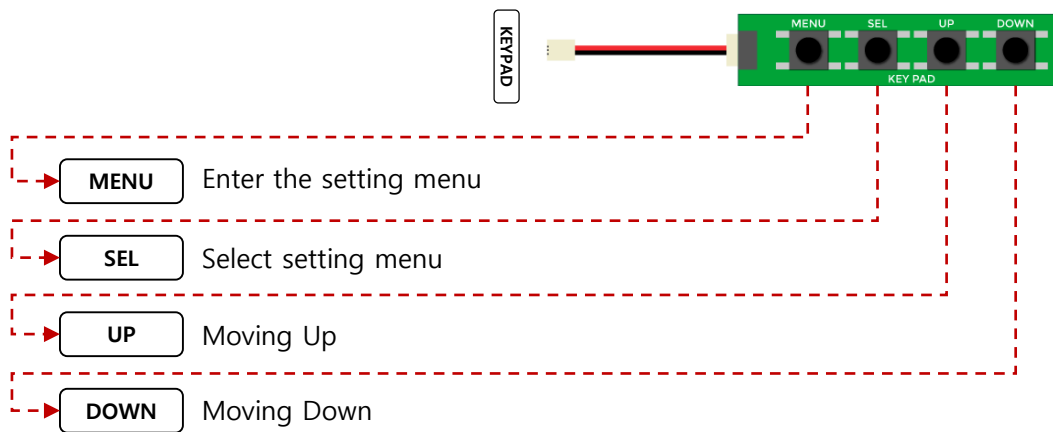5 ▼ON (AVM Use)

P
R
N
D

External AVM

OEM Cam

External AVM View with OEM Cam

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

P
R
N
D

External Front Cam
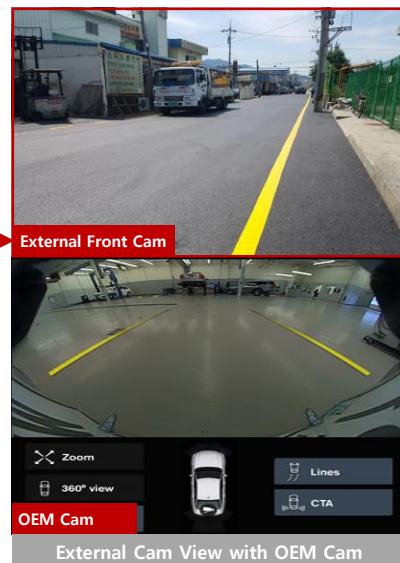
OEM Cam

External Cam View with OEM Cam

USE PAS-LINE SETTING

MENU — Enter the setting menu

SEL — Select setting menu

UP — Moving Up

DOWN — Moving Down
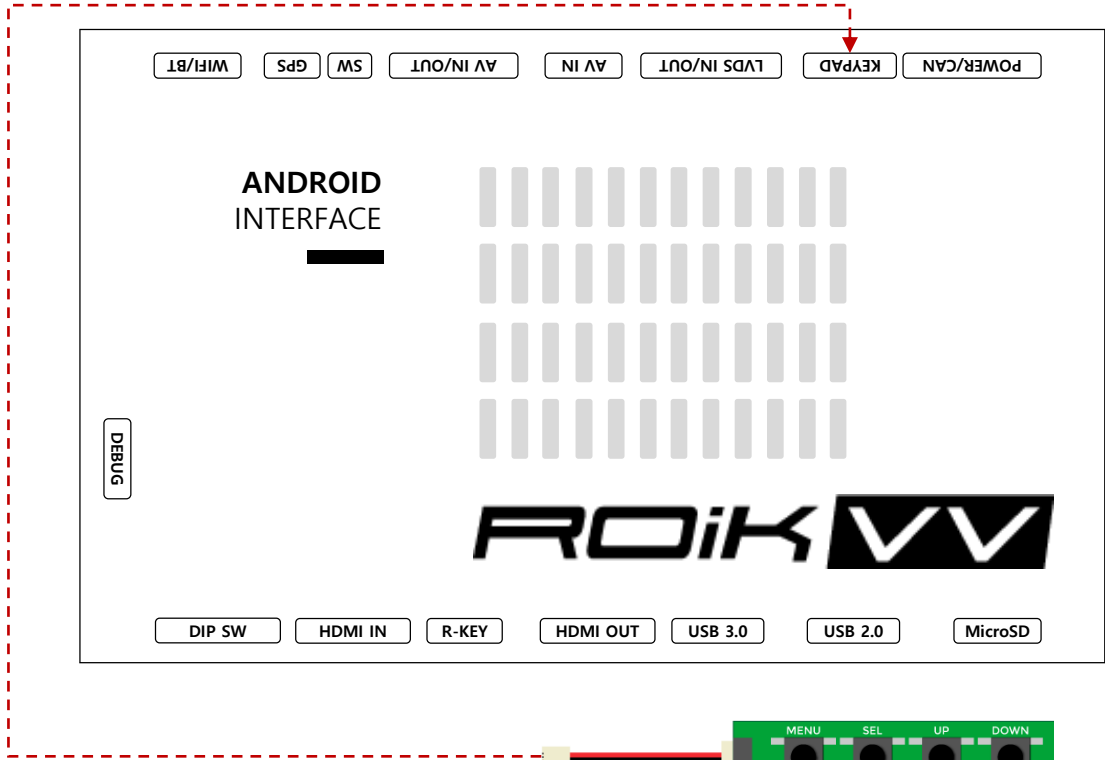

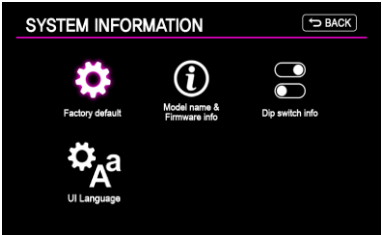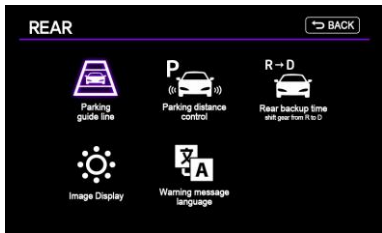**Select "REAR"**
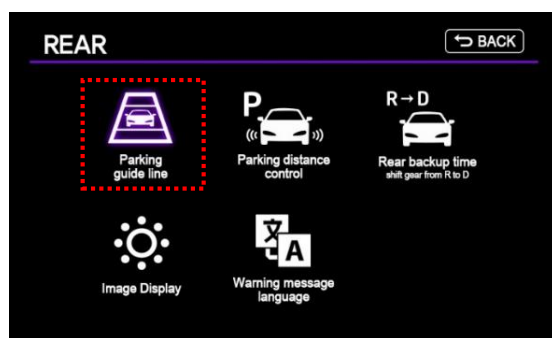
Select "Parking guide line"
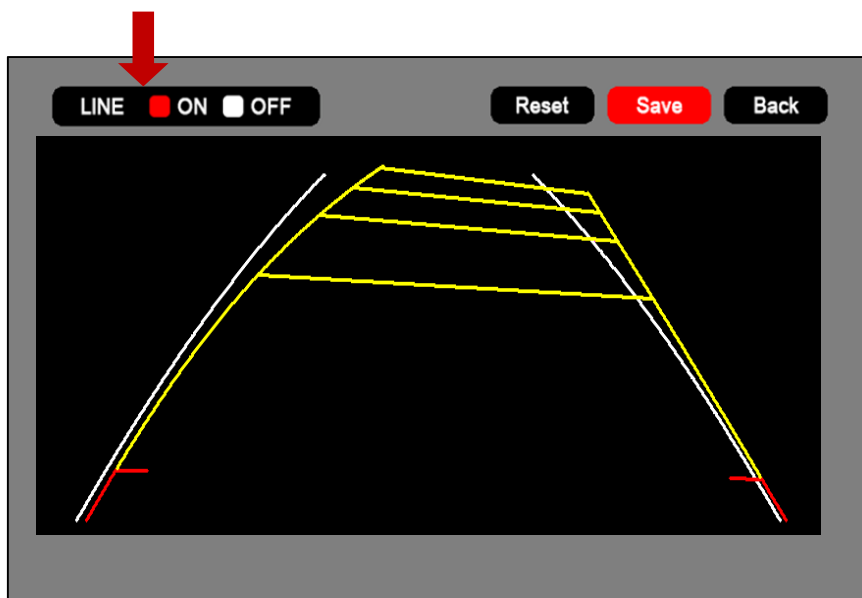
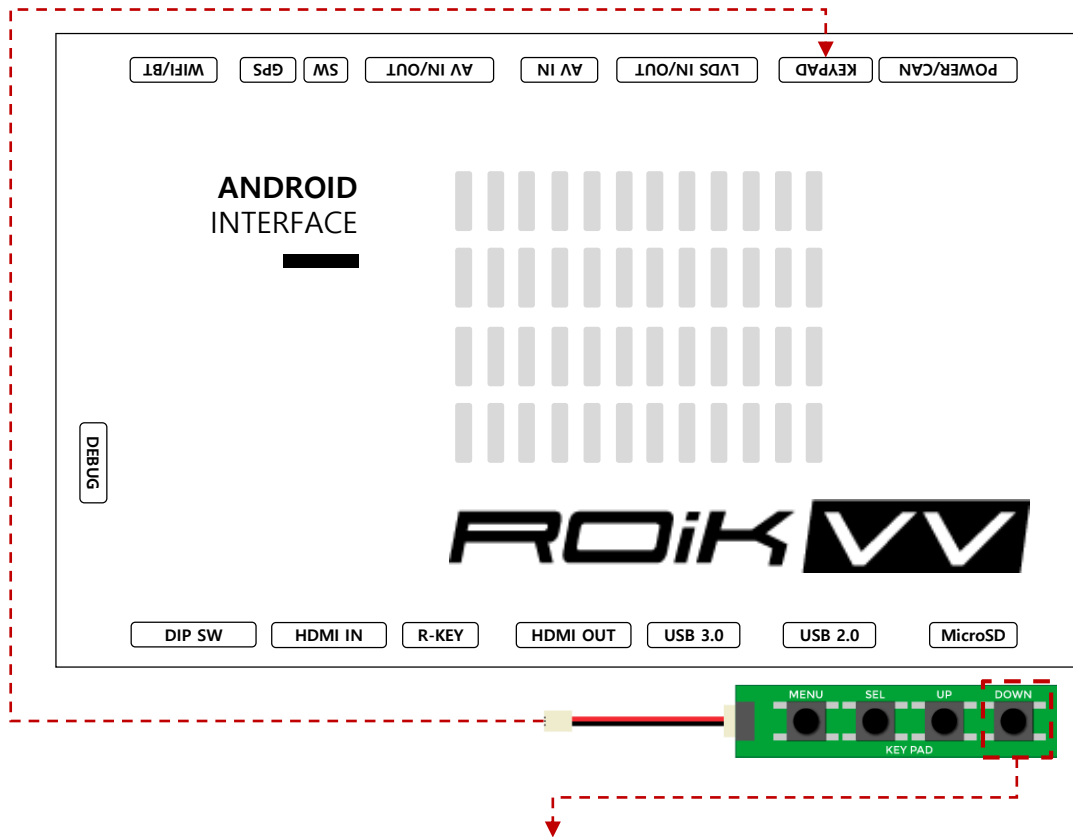**To use pas line, you can use it after selecting line on the setting screen**

INTERFACE SETTING

ANDROID
INTERFACE

| | | | | |

WIFI/BT | GPS | SW | AV IN/OUT | AV IN | LVDS IN/OUT | KEYPAD | POWER/CAN

DEBUG

ROiK VV

DIP SW | HDMI IN | R-KEY | HDMI OUT | USB 3.0 | USB 2.0 | MicroSD

MENU | SEL | UP | DOWN
KEY PAD

MENU — Enter the setting menu

SEL — Select setting menu

UP — Moving Up

DOWN — Moving Down

SETTINGS ✕ CLOSE
- Android
- DVB-T
- DVD
- HDMI
- FRONT
- REAR
- System Information

DVB-T OFF ● ↩ BACK
- Image Display
- Remote Model
- Remote Memory

REAR ↩ BACK
- Parking guide line
- Parking distance control
- Rear backup time shift gear from R to D
- Image Display
- Warning message language

SYSTEM INFORMATION ↩ BACK
- Factory default
- Model name & Firmware info
- Dip switch info
- UI Language

ANDROID ● ON ↩ BACK
- Image Display

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 Screen