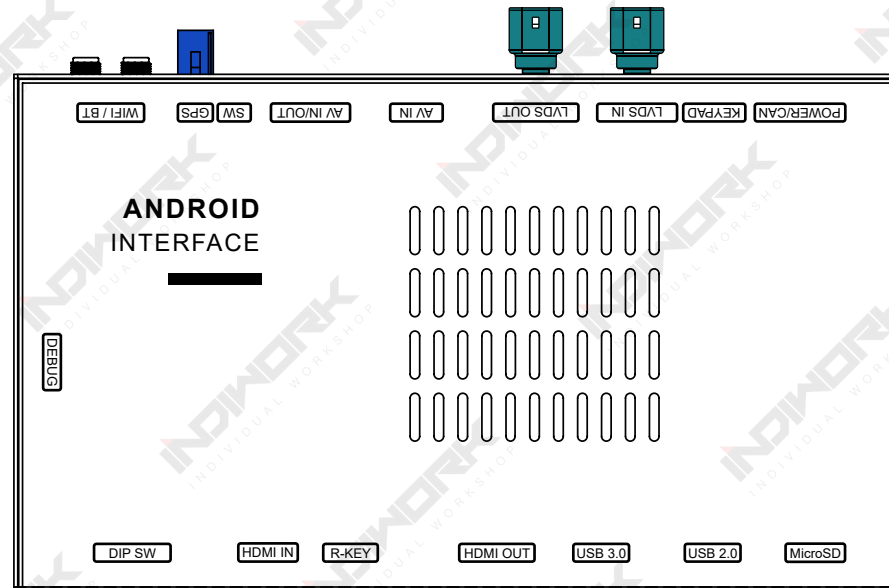


# Instruction Manual

All in One Type Android System

## A10-Volvo



|                      |                |
|----------------------|----------------|
| Model Name           | A-LINK2-Volvo  |
| Latest Firmware Date | 2019 - 01 - 03 |
| Manual Version       | Rev. 1.0       |
| Language             | English        |

# Main Specifications

|                    |                                                                                                  |
|--------------------|--------------------------------------------------------------------------------------------------|
| <b>OS</b>          | Android 7.1.2(Nougat)                                                                            |
| <b>CPU</b>         | Six-Core 64bit Server Class Cortex-A72 Core @2.0Ghz,<br>Mali-T860 Quad-Core GPU (Total Ten-Core) |
| <b>VPN</b>         | H.264/H.265/VP9 up to 4Kx2K@60fps (4K Video)                                                     |
| <b>Memory</b>      | 2GB DDR3                                                                                         |
| <b>USB</b>         | USB2.0 High Speed Port                                                                           |
| <b>USB 3.0</b>     | USB3.0 5.0Gbps Port                                                                              |
| <b>Wireless</b>    | 2.4GHz/5GHz Dual-Band WiFi,<br>Support 802.11a/b/g/n/ac, Bluetooth 4.1                           |
| <b>GPS</b>         | Ublox8 GPS<br>(GLONASS/BEIDOU/GALILEO/QZSS/SBAS)                                                 |
| <b>HDMI IN</b>     | DC 12V ~ 24V                                                                                     |
| <b>HDMI OUT</b>    | HDMI 2.0, Support maximum 4K@60Hz display                                                        |
| <b>Speaker</b>     | 2W                                                                                               |
| <b>I / O</b>       | Stereo Audio Out, Mic (voice recognition),<br>CVBS Out(On LVDS Out)                              |
| <b>Input Power</b> | DC 8V ~ 24V                                                                                      |
| <b>Temperature</b> | -20°C ~ 80°C                                                                                     |
| <b>Operationg</b>  | -15°C ~ 70°C                                                                                     |

## Product Warranty

Thank you for purchasing our product.

We offer the warranty for 1 year from the date of purchase.

This product has been tested and have passed under our strict and qualified control. If the failure occurred due to the carelessness of workmanship within one year after the purchase, we are responsible to repair free of charge.

• **Free service** : Manufacturing defects, When naturally occurring failures within the warranty period.

\* When the warranty period has elapsed, Failure the caused by customer's mistake, Failure thecaused by natural disasters.

**Warranty : One years from the original date of purchase.(12 months)**

# Components



**Quadlock Harness**



**AV IN / OUT Cable**



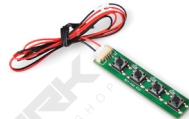
**LVDS Cable**



**AV Cable**



**External GPS**



**KEYPAD**



**MicroPhone**



**IR Sensor**



**BT / WIFI Antenna**



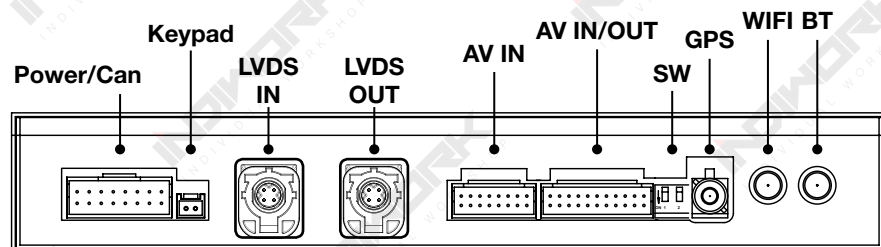
**External Speaker**

## Optional Parts (sold separately at the indiwork)

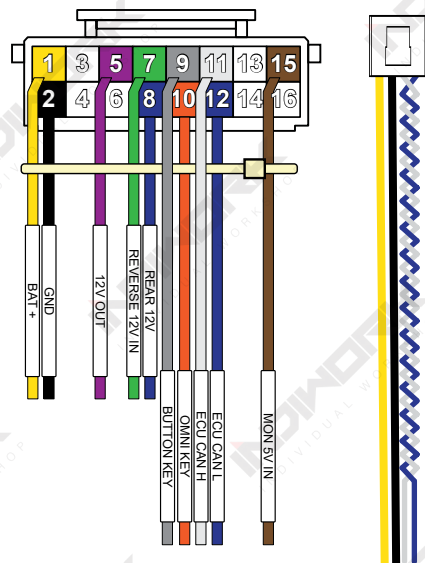


**Quadlock Harness**

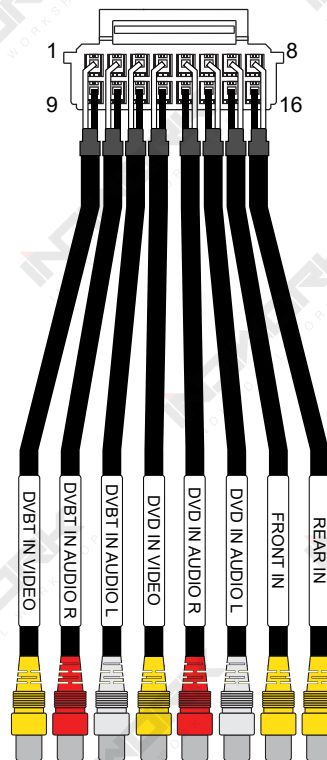
# Body Connector specifications



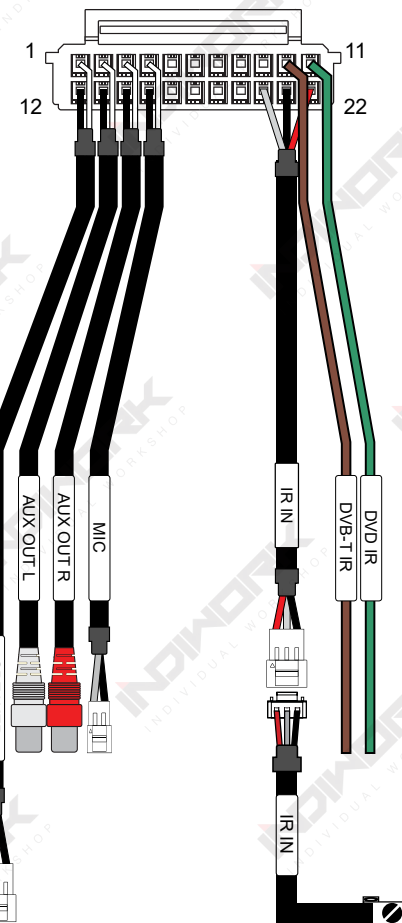
## POWER/CAN CABLE



| POWER / CAN CABLE |                     |    |            |
|-------------------|---------------------|----|------------|
| 1                 | BATTERY POWER INPUT | 9  | BUTTON KEY |
| 2                 | GROUND              | 10 | OMNI KEY   |
| 3                 |                     | 11 | ECU CAN H  |
| 4                 |                     | 12 | ECU CAN L  |
| 5                 | 12V(ACC) OUT        | 13 |            |
| 6                 |                     | 14 |            |
| 7                 | REVERSE 12V IN      | 15 | MON 5V IN  |
| 8                 | REAR 12V POWER OUT  | 16 |            |

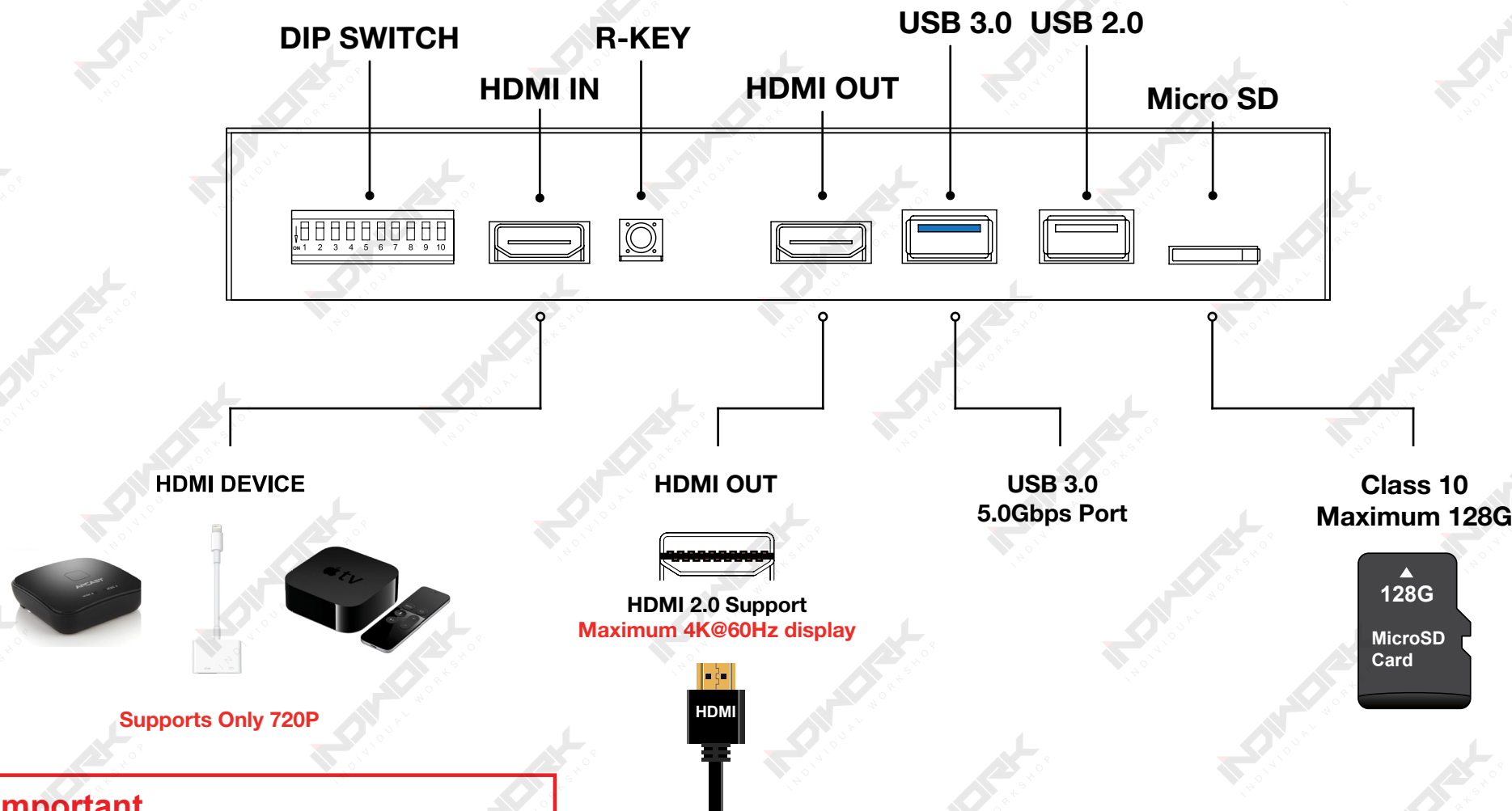


| AV CABLE |                       |    |                     |
|----------|-----------------------|----|---------------------|
| 1        | DVBT VIDEO INPUT      | 9  | GND_DVBT VIDEO      |
| 2        | DVBT AUDIO R          | 10 | GND_DVBT AUDIO R    |
| 3        | DVBT AUDIO L          | 11 | GND_DVBT AUDIO L    |
| 4        | DVD VIDEO INPUT       | 12 | GND_DVD VIDEO       |
| 5        | DVD AUDIO R           | 13 | GND_DVD AUDIO R     |
| 6        | DVD AUDIO L           | 14 | GND_DVD AUDIO L     |
| 7        | FRONT-CAM VIDEO INPUT | 15 | GND_FRONT-CAM VIDEO |
| 8        | RV-CAM VIDEO INPUT    | 16 | GND_RV-CAM VIDEO    |



| AV CABLE |                    |    |                        |
|----------|--------------------|----|------------------------|
| 1        | EXTERNAL_SPEAKER + | 12 | GND (EXTERNAL_SPEAKER) |
| 2        | AUX AUDIO L        | 13 | GND (AUX AUDIO L)      |
| 3        | AUX AUDIO R        | 14 | GND (AUX AUDIO R)      |
| 4        | MIC +              | 15 | GND (MIC)              |
| 5        |                    | 16 |                        |
| 6        |                    | 17 |                        |
| 7        |                    | 18 |                        |
| 8        |                    | 19 |                        |
| 9        |                    | 20 | IR_SIGNAL              |
| 10       | DVB-T_IR           | 21 | IR_GND                 |
| 11       | DVD_IR             | 22 | IR_POWER               |

# Body Connector specifications



## Important

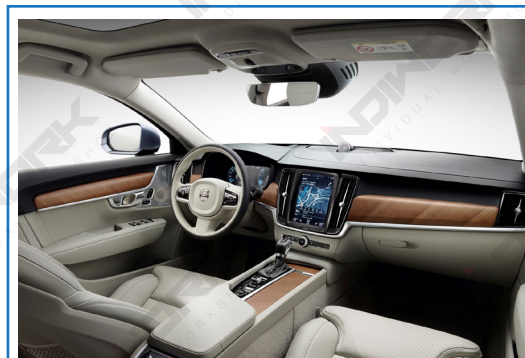
Using for "HDMI" port should be select  
"Input Device Model" in setting menu

If it does not selected input device model  
The screen might be able to white, black screen(not working)

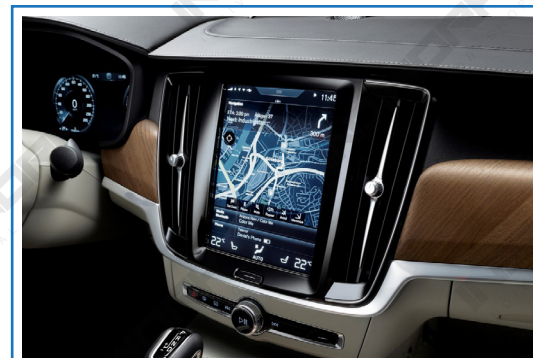


# Car Compatibility Chart

| Car Models | Production Year | Specific Modelsv        |
|------------|-----------------|-------------------------|
| Volvo S90  | 2016 -          | - V-Sensus Infotainment |
| Volvo V90  | 2016 -          | - V-Sensus Infotainment |
| Volvo XC90 | 2016 -          | - V-Sensus Infotainment |
| Volvo XC60 | 2016 -          | - V-Sensus Infotainment |
|            |                 |                         |



2016~ New Volvo



Sensus Infotainment



VOLVO S90



VOLVO V90



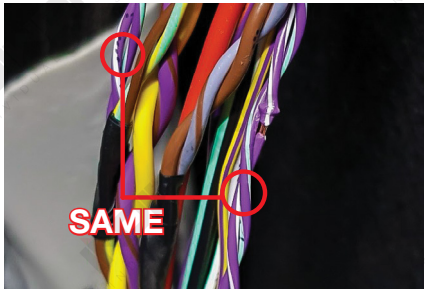
VOLVO XC60



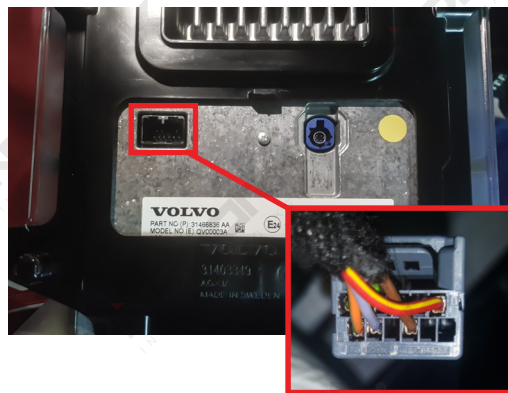
VOLVO XC90

# Full Installation Diagram

## Behind Side Door Cove (Passenger)

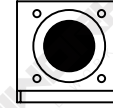


(Brown) B+ = ■  
(Black Mint) GROUND = ■  
(Purple White) ECU CAN H = ■  
(Purple Mint) ECU CAN L = ■



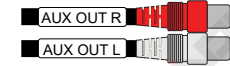
(Light Purple) Button Key Pin # 11 = ■  
(Brown) Mon 5V IN Pin # 9 = ■

## Reset Switch



| Operation                    | Operation                   |
|------------------------------|-----------------------------|
| Press Shot time<br>1 seconds | Start the Touch Calibration |
| Press Long time<br>5 seconds | Restart the Device          |

## AV IN/OUT Port



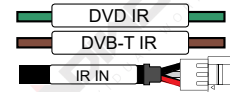
AUX



External Speake

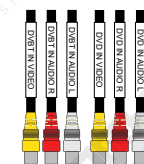


Microphone



DVB-T, DVD

## AV IN Port



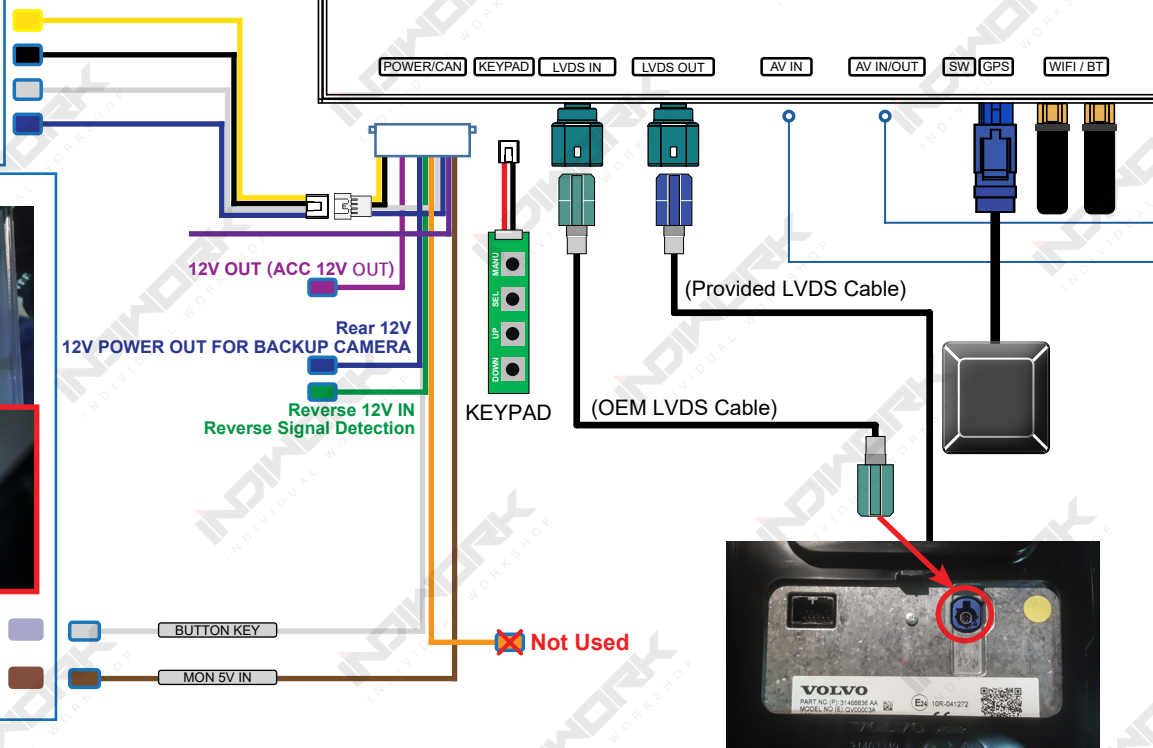
DTV and DVD



Front Camera



Rear Camera



✗ Not Used

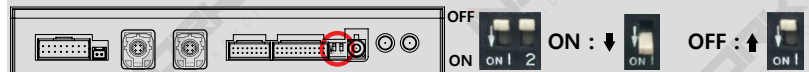
# DIP Switch Settings



| PIN | ON (▼)                               | OFF(▲)                                           |
|-----|--------------------------------------|--------------------------------------------------|
| 1   | External Rear View Camera            | Original Rear View Mode<br><b>(OEM CAMERA)</b>   |
| 2   | External Front View Camera(AV1 Mode) | <b>Skip</b> External Front View Camera(AV1 Mode) |
| 3   | Not Used Default (OFF)               |                                                  |
| 4   | IR for ASUKA (DVB-T) Touch           | IR for Remote Controller                         |
| 5   | Not Used Default (OFF)               |                                                  |
| 6   | Not Used Default (OFF)               |                                                  |
| 7   | Selection of car model               |                                                  |
| 8   |                                      |                                                  |
| 9   |                                      |                                                  |
| 10  |                                      |                                                  |

| No.7   | No.8   | No.9   | No.10  | Car Model |      |  |  |
|--------|--------|--------|--------|-----------|------|--|--|
|        |        |        |        | S90       |      |  |  |
| OFF(▲) | OFF(▲) | OFF(▲) | OFF(▲) | V90       | V60  |  |  |
|        |        |        |        | XC90      | XC60 |  |  |

## DIP Switch Settings



| PIN | ON (▼)                 | OFF(▲)    |
|-----|------------------------|-----------|
| 1   | Not Used Default (OFF) |           |
| 2   | External GPS Antenna   | GPS FAKRA |

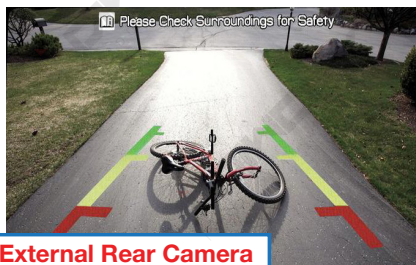


# Rear View Script

**Gear : R**



**External Rear Camera**  
**No-Front Camera**

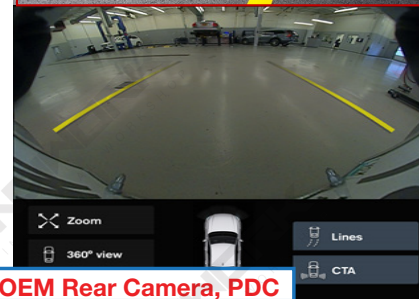


**OEM PDC**

**Gear : R** ↑  
**Gear : D** ↓



**OEM Rear Camera**  
**External Front Camera**

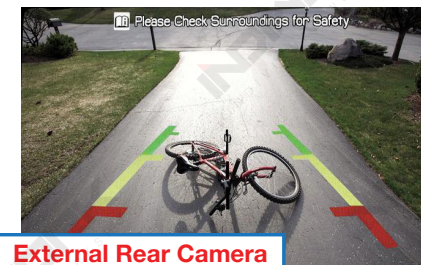


**OEM Rear Camera, PDC**

**Gear : R** ↑  
**Gear : D** ↓



**External Rear Camera**  
**External Front Camera**



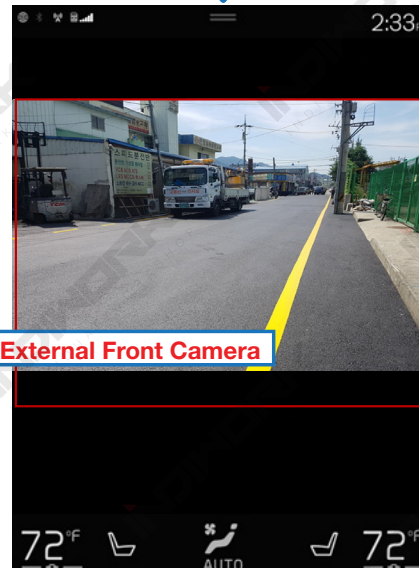
**OEM PDC**

**Gear : R** ↑  
**Gear : D** ↓

**Gear : D**



**OEM or Android Screen**



**External Front Camera**



**External Front Camera**

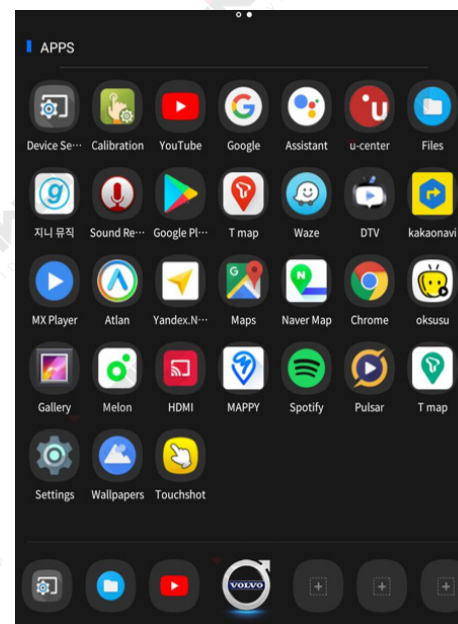
# Activation by original buttons



**Volvo V-Sensus infotainment system**

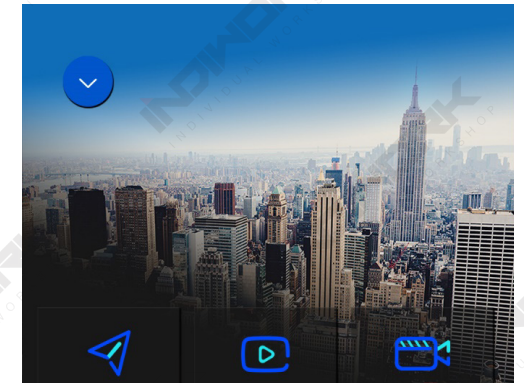
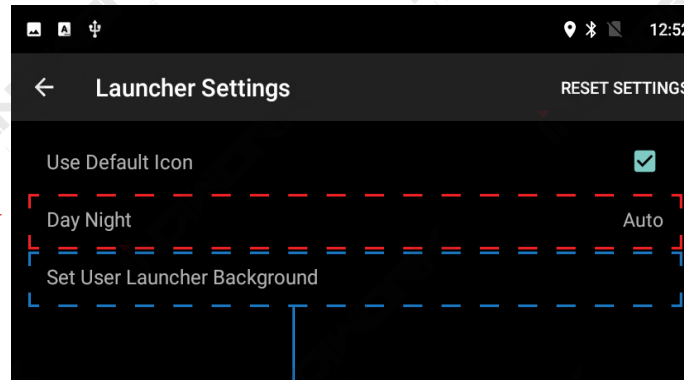
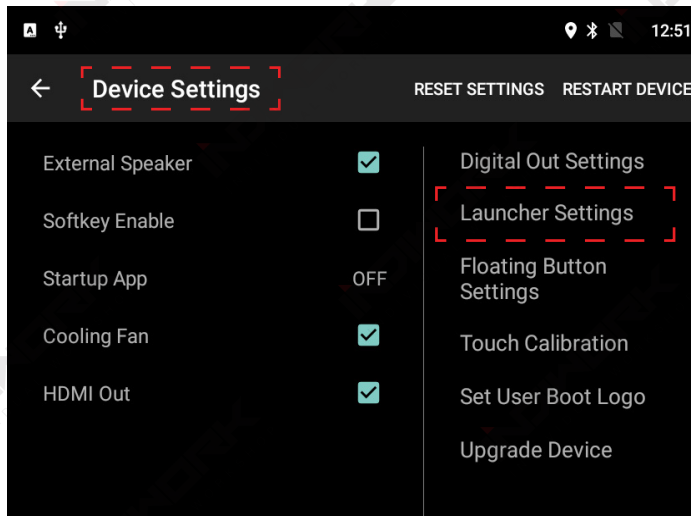
| Button | Function       | Operation                  | Remarks           |
|--------|----------------|----------------------------|-------------------|
| 1      | Changing Modes | Press the button 2 seconds | Order : → Android |
|        |                | Press the button 2 times   | Order : → HDMI    |
|        |                | Press the button 3 times   | Order : → DVB-T   |
|        |                | Press the button 4 times   | Order : → DVD     |
|        |                | Press the button Shot time | Order : → OEM     |

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

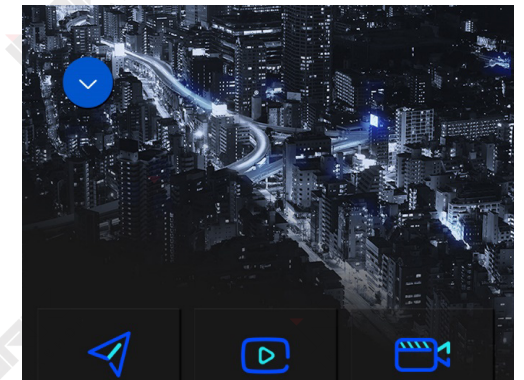




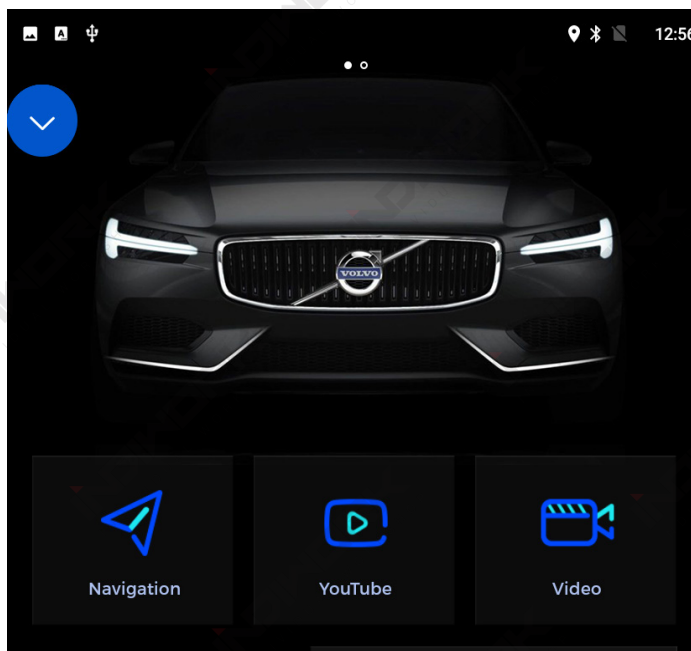
# Main Background Image



**Day Screen**



**Night Screen**

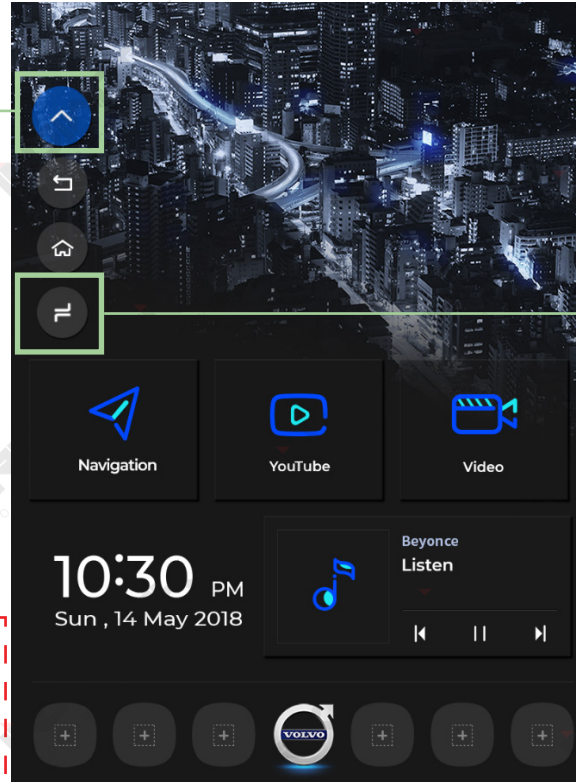
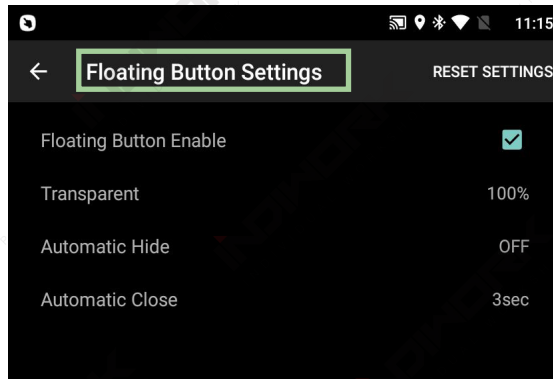


**You can change the background image.**

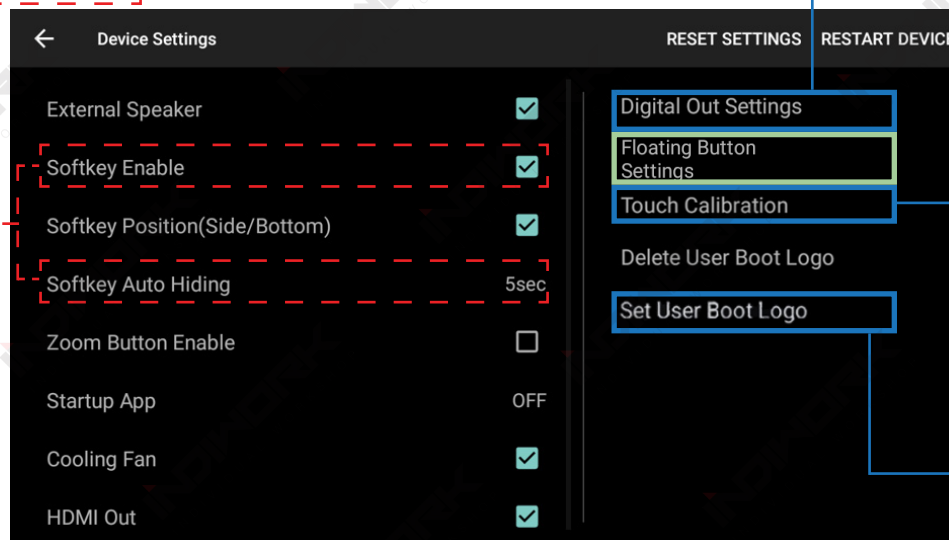
**File Format : PNG, JPG**

**File Size : 892x1104 pixel**

# Android User Interface



## SoftKey

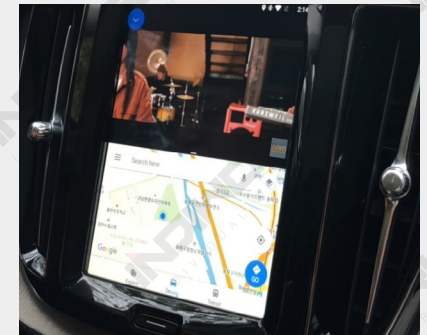


## Digital Out Settings



Adjust the screen size and position and color

## "PIP" Function

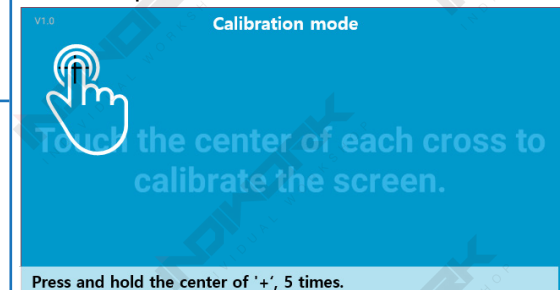


Press the Button 2sec

※ Some applications may not supports PIP function.

## Calibration

Capacitive and Resistive Touch



Set User Boot Logo

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

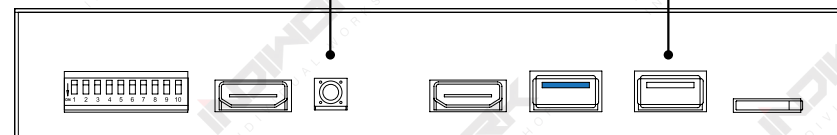
# Android Firmware



**Only USB2.0 port supports for Android Firmware**

Recovery Key

USB 2.0

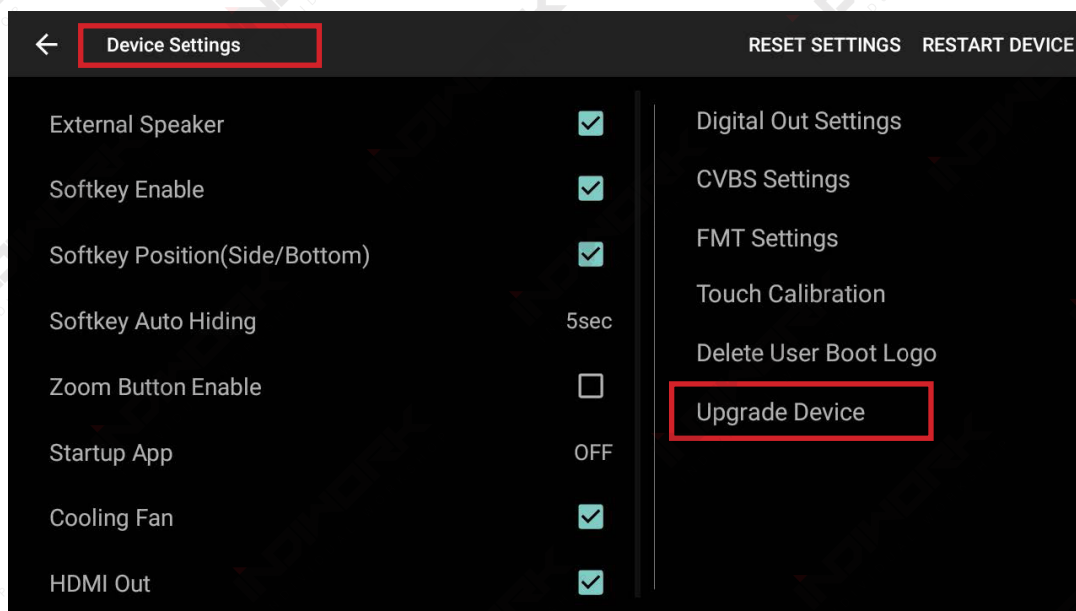
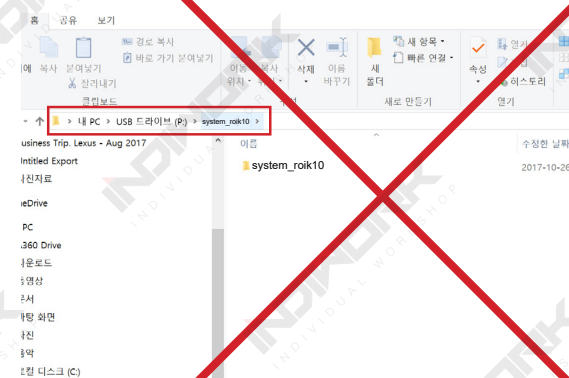
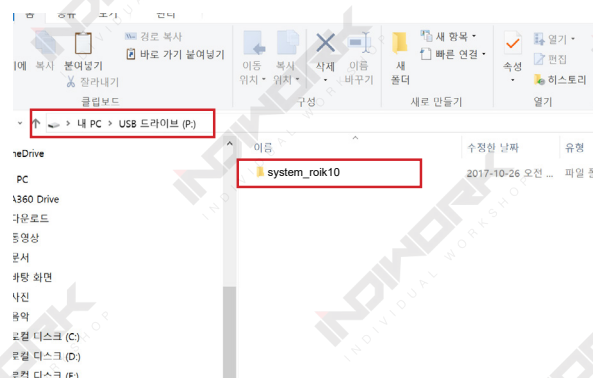


1. Download firmware in "indiwork" website

<http://indiwork.co.kr/a-link-firmware-update-international/>

2. Copy the "system\_roik10" folder to the sd card root directory

**\* USB format type = FAT32**



## A-LINK DEVICE SETTING

- Copy the 'system\_roik10' folder to the root of the SD card.

**THERE ARE TWO WAYS FOR START THE FIRMWARE.**

- Select the 'setting > system update', and press the OK button.  
**It will start upgrade**

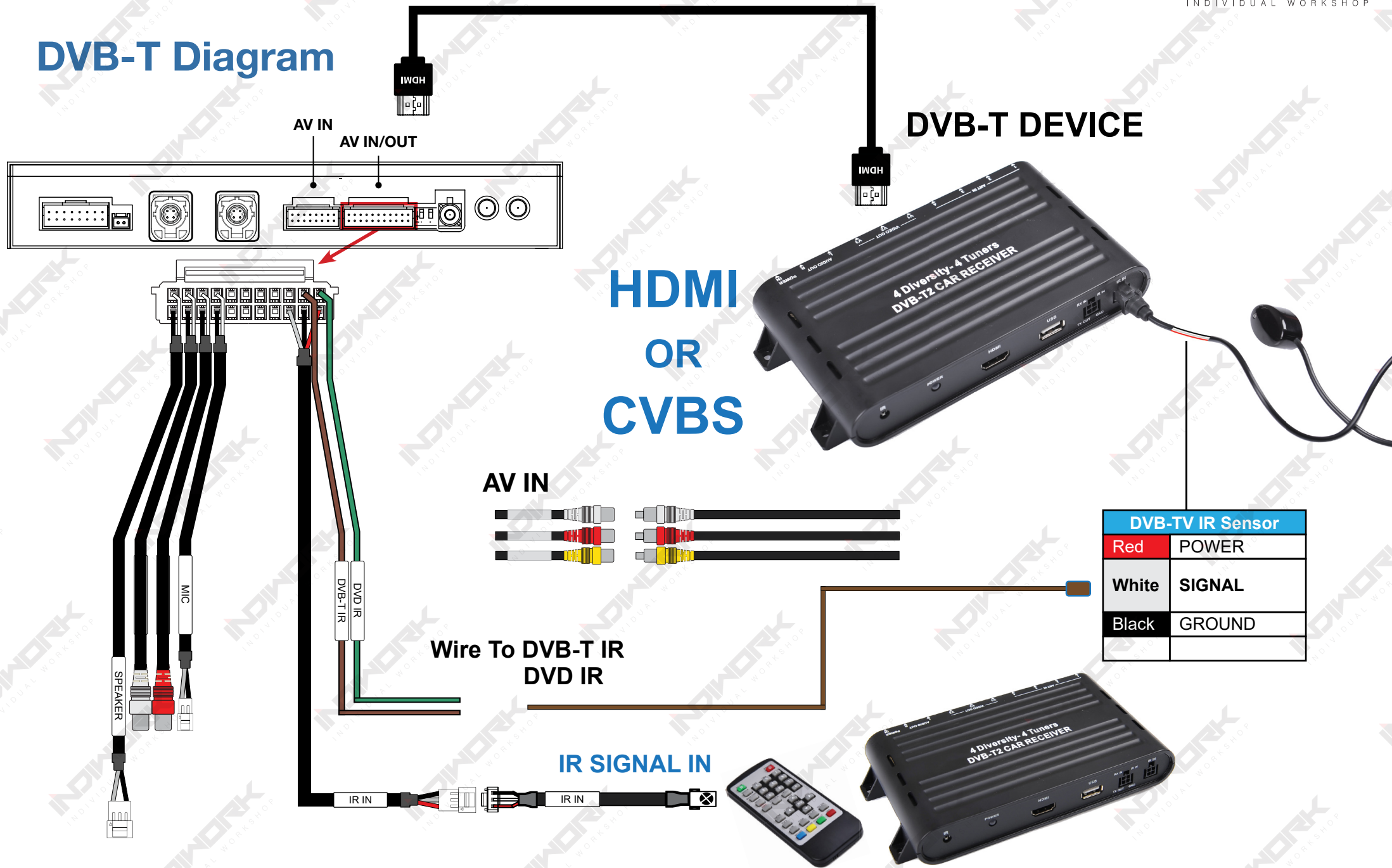
- Push hold "Recovery Key" and turn on (re-connect power cable),  
**It will start upgrade**

**\* Update Time will 4~5 min, and first booting time will be 4~5 min.**

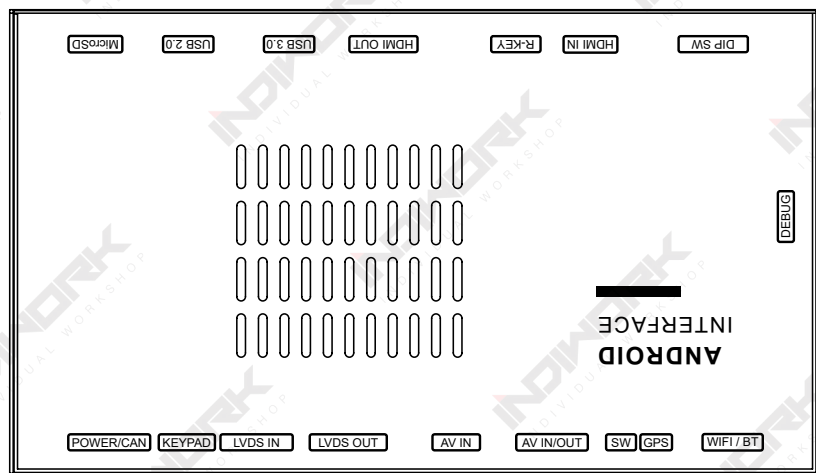
**\* Should be factory reset. when it done firmware**



# DVB-T Diagram



# Settings (How To Use KEYPAD)

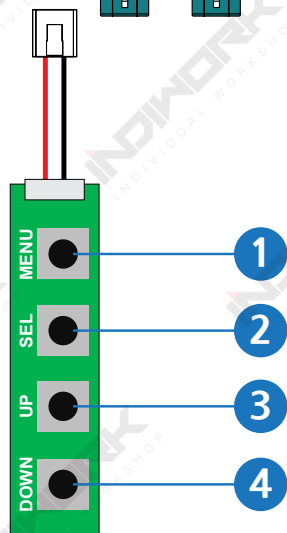


## KEYPAD - Function #1

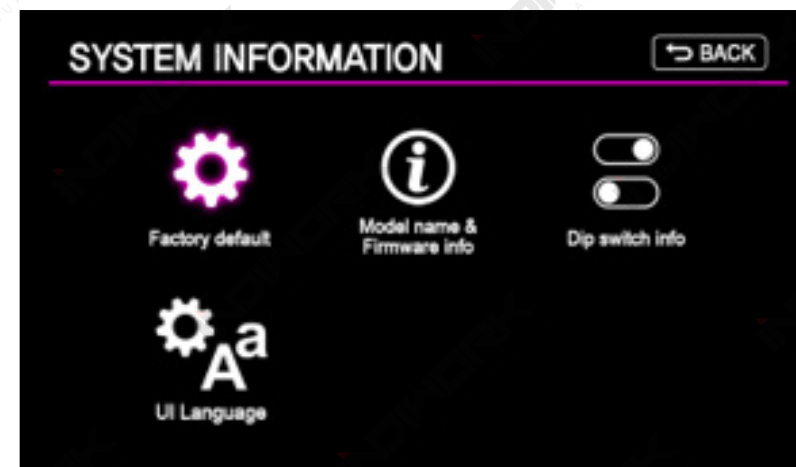
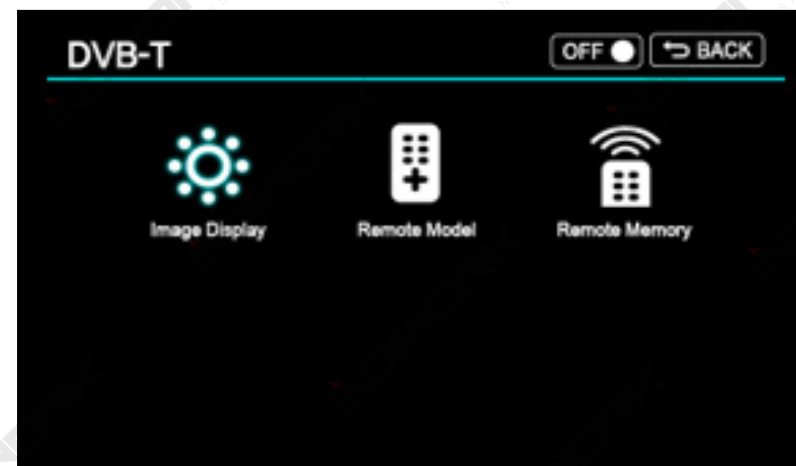
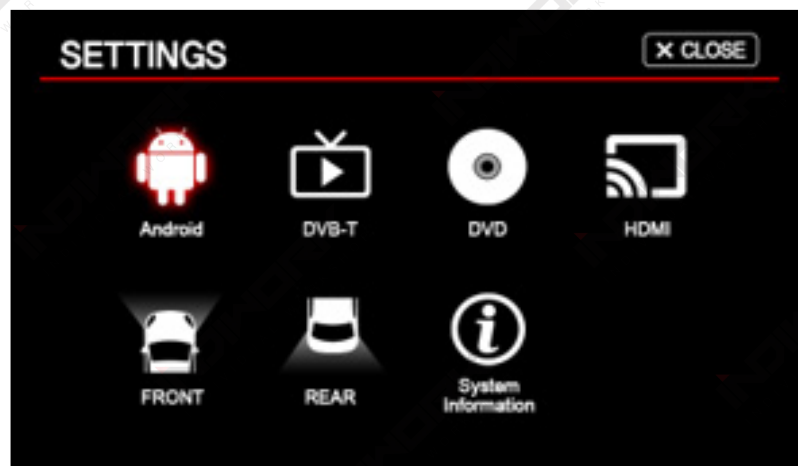
| Button           | Function                                                   | Operation                   | Remarks                                       |
|------------------|------------------------------------------------------------|-----------------------------|-----------------------------------------------|
| <b>1</b><br>MENU | Changing Modes                                             | Press the button short time | Order : Android → HDMI<br>→ DVB-T → DVD → OEM |
| <b>2</b><br>SEL  | Setting Menu<br>※ Only in a Android, HDMI,DVB-T,DVD screen | Press the button short time |                                               |

## KEYPAD - Function #2

| Button                          | Function                                               | Operation                       |
|---------------------------------|--------------------------------------------------------|---------------------------------|
| <b>1</b><br>MENU                | Back to previous menu<br>When press the button short.  | Press the button short time     |
| <b>2</b><br>SEL                 | Select the setting menu<br>and setting values.         | Press the button short time     |
| <b>3</b><br>UP <b>4</b><br>DOWN | Move the menu-pointer<br>and adjust the setting values | Press the button short time     |
| <b>4</b><br>DOWN                | Quick information<br>Check the Firmware date           | Press the button 3Sec Long time |



# Settings



## Android HDMI

- Adjust BRIGHT and CONTRAST Settings
- Model Select

## DVB-T DVD

- Adjust BRIGHT and CONTRAST Settings
- Remote Model
- Remote memory

## Front Camera Rear Camera

- Adjust BRIGHT and CONTRAST Settings
- Parking Guide Line On,OFF
- Parking distance control
- Camera Keeping Time
- Warning Message

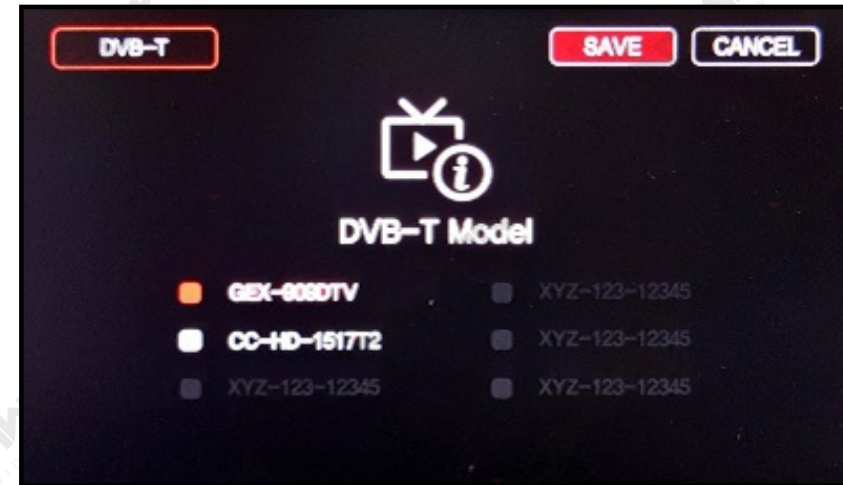
## System information

- Factory default
- Model name & Firmware info
- Dip switch info
- UI Language

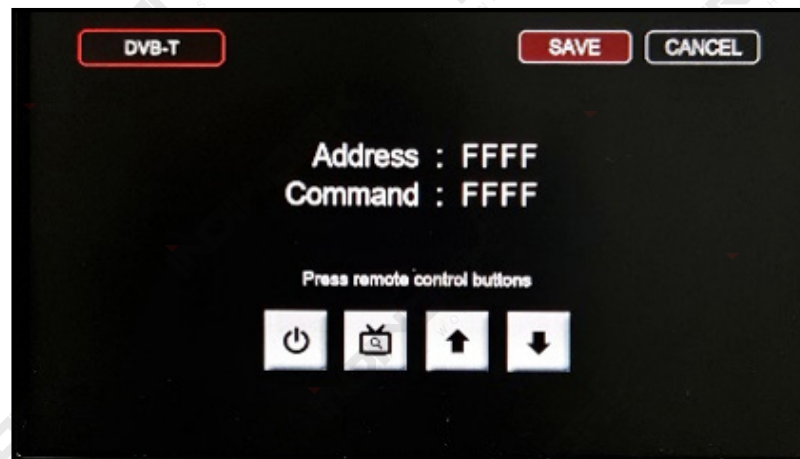
# Settings



Remote Controller Model Select



DVB-T Model Select



Remote IR Memory (User setting)



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