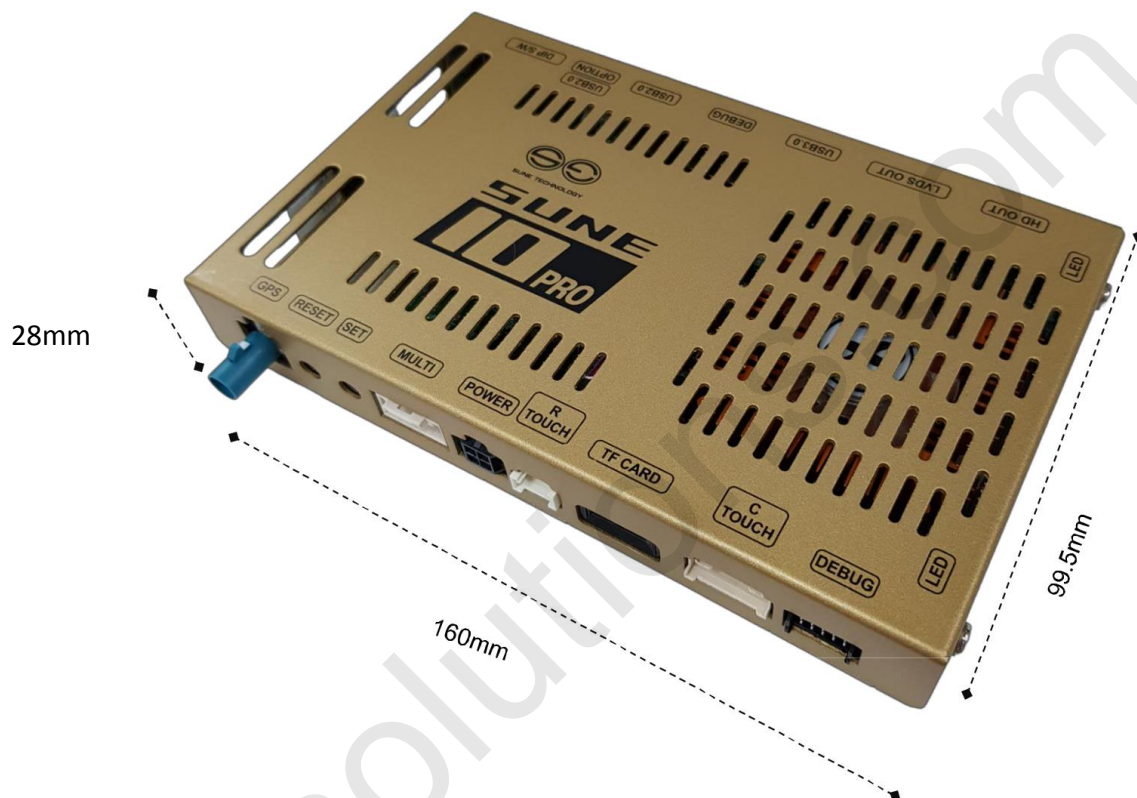


SUNE10 PRO (4+64G) Android System Installation Guide

Features

- Install and update various application via Android Play-Store
- High quality video display (720P, simultaneous Video Output of LVDS and HDMI)
- Multiple ways to store data and communication ports (3 * USB, 1*Micro SD slot)
- Supports AUX OUT by Bluetooth and FMTX
- Access Internet & Data using Wi-Fi and 4G Data with dongle (Dongle Option)
- Program & firmware update by USB Thumb memory stick

Product Dimensions



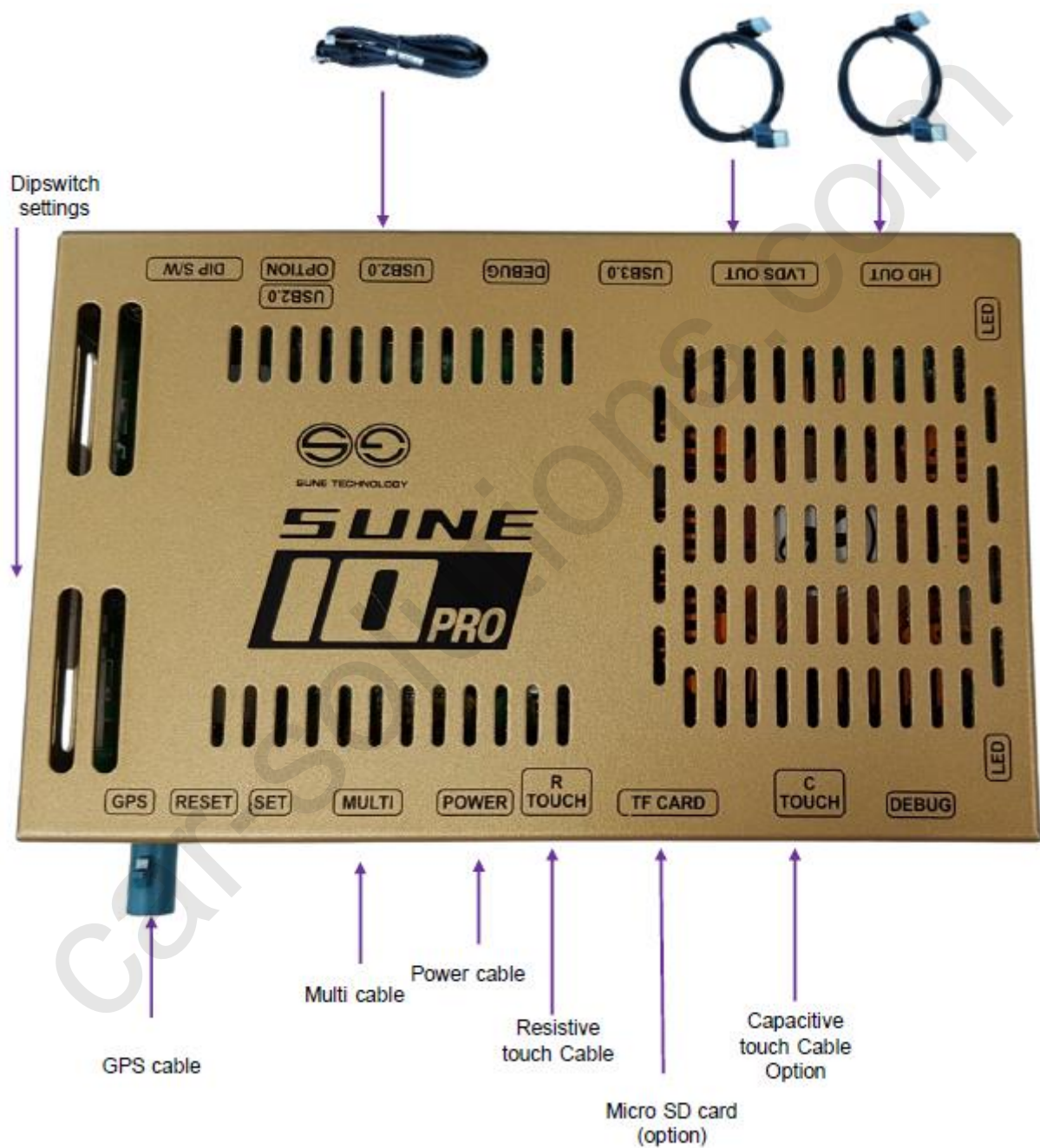
Specifications

OS Version		Android 10.0
CPU		ARM Cortex-A72 + Cortex-A53@2.0GHz (HEXA CORE) ARM Mali-T860 (QUAD CORE)
Memory	RAM	4GB LPDDR3
	Internal Storage	64GB eMMC
	External Storage	microSD slot (max 128GB)
Network	Wi-Fi	802.11 a/b/g/n/ac (2.4GHz / 5GHz)
	Bluetooth	4.0
	Modem	LTE / UMTS / GSM CONNECT TYPE: External USB Dongle type:option
	GPS	GPS + GLONASS
Video	OUT	LVDS 5CH x 1 / HDMI x 1
	IN	None
Audio	OUT	AUX + SPK + BT AUX + FM TX
	IN	MIC
USB port		HOST x 3 (internal 2.0 port x 1 + 3.0 port x 1) + extension cable port x 1 OTG x 1
Touch input		Resistive + Capacitive + UART
Power		DC 9 V - 18 V

Package Content

 <p>Mainboard * 1ea</p>		 <p>POWER * 1ea (HPOWER0245)</p>	 <p>MULTI * 1ea (HAERTC0321)</p>
		 <p>GPS * 1ea (HAGPS0013)</p>	 <p>HDMI Cable * 1ea (HARETC0067)</p>
 <p>USB extension cable * 1ea (HARETC0078)</p>	 <p>MIC * 1ea (MICPHOC0003)</p>	 <p>SPKEAR * 1ea (SPEAKER007)</p>	 <p>Resistive touch * 1ea (HTOUCH0022)</p>
 <p>Capacitive Touch * 1ea (HTOUCH0036) Option</p>	 <p>Touch Board * 1ea (QCPASS0821) Option</p>		
 <p>4G Dongle * 1ea Option</p>	 <p>4G Dongle cable * 1ea Option</p>		

Connection



Dip Switch

*Resolution type selection



1280 x 720 Resolution /
OUTPUT 800 x 480 (Ratio 16:9)



1600 x 600 Resolution (For Wide monitor)
OUTPUT 800 x 480 (Ratio 8:3)



OUTPUT 1280 x 720 Resolution (Ratio
16:9)



OUTPUT 1920 x 720 Resolution (Ratio
16:9)



DIP 5 OFF USE EXTRA GPS ANTENNA
DIP 5 ON USE OEM/FACTORY GPS ANTENNA

*Touch Type Selection



UART & Cap Touch Use

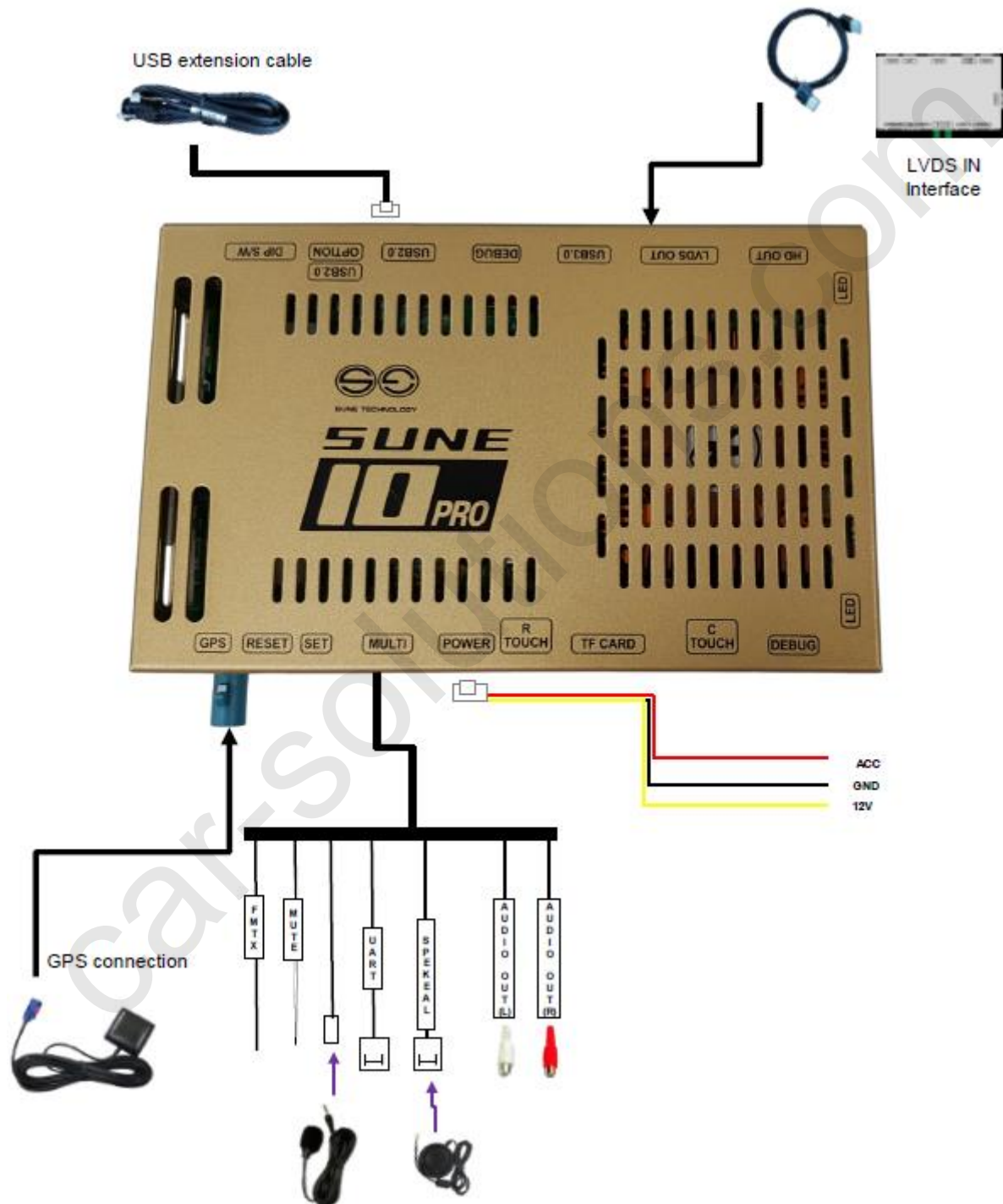


Lexus I drive / Infiniti

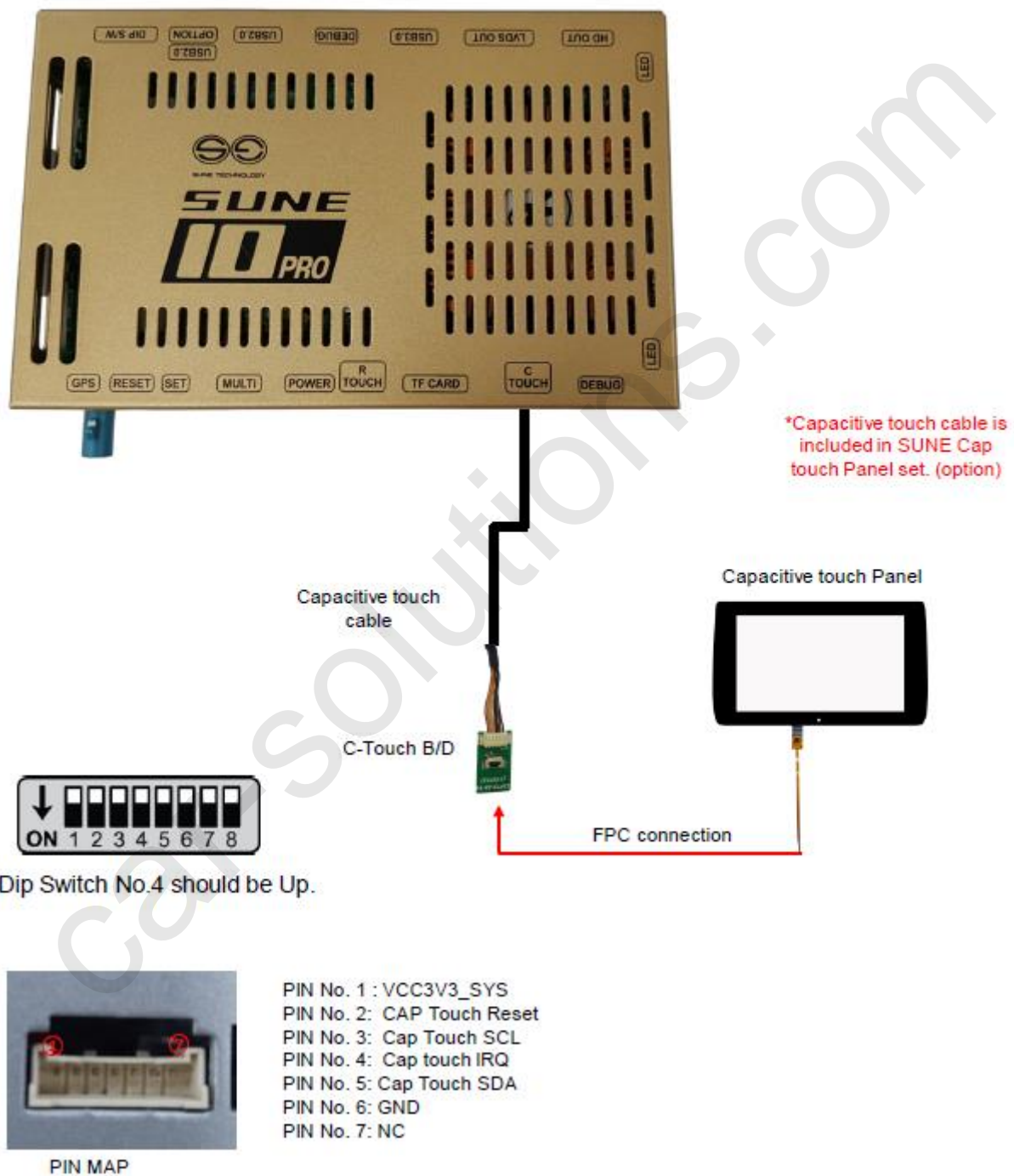


Resistive Touch Use

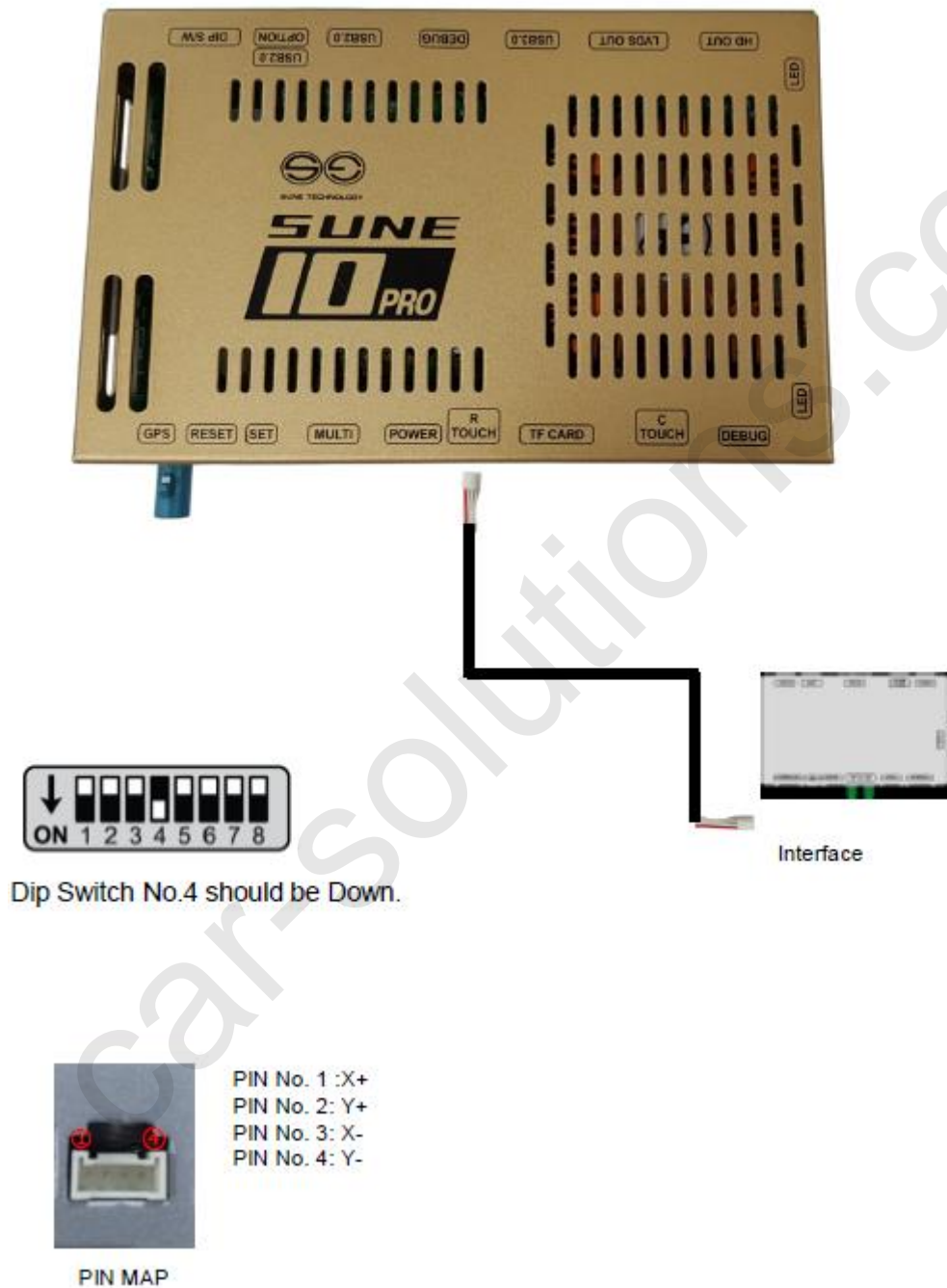
Installation



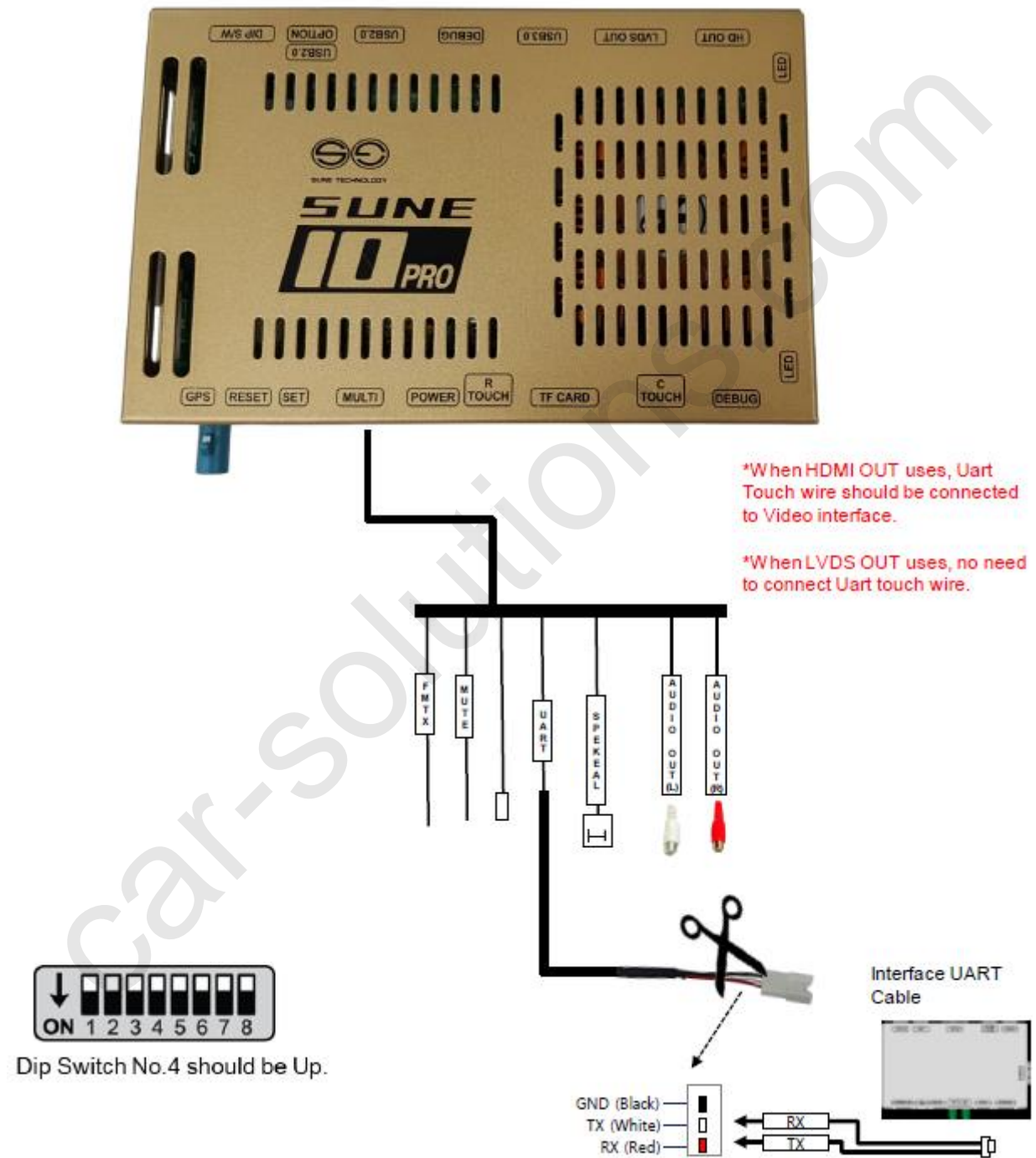
Capacitive touch installation



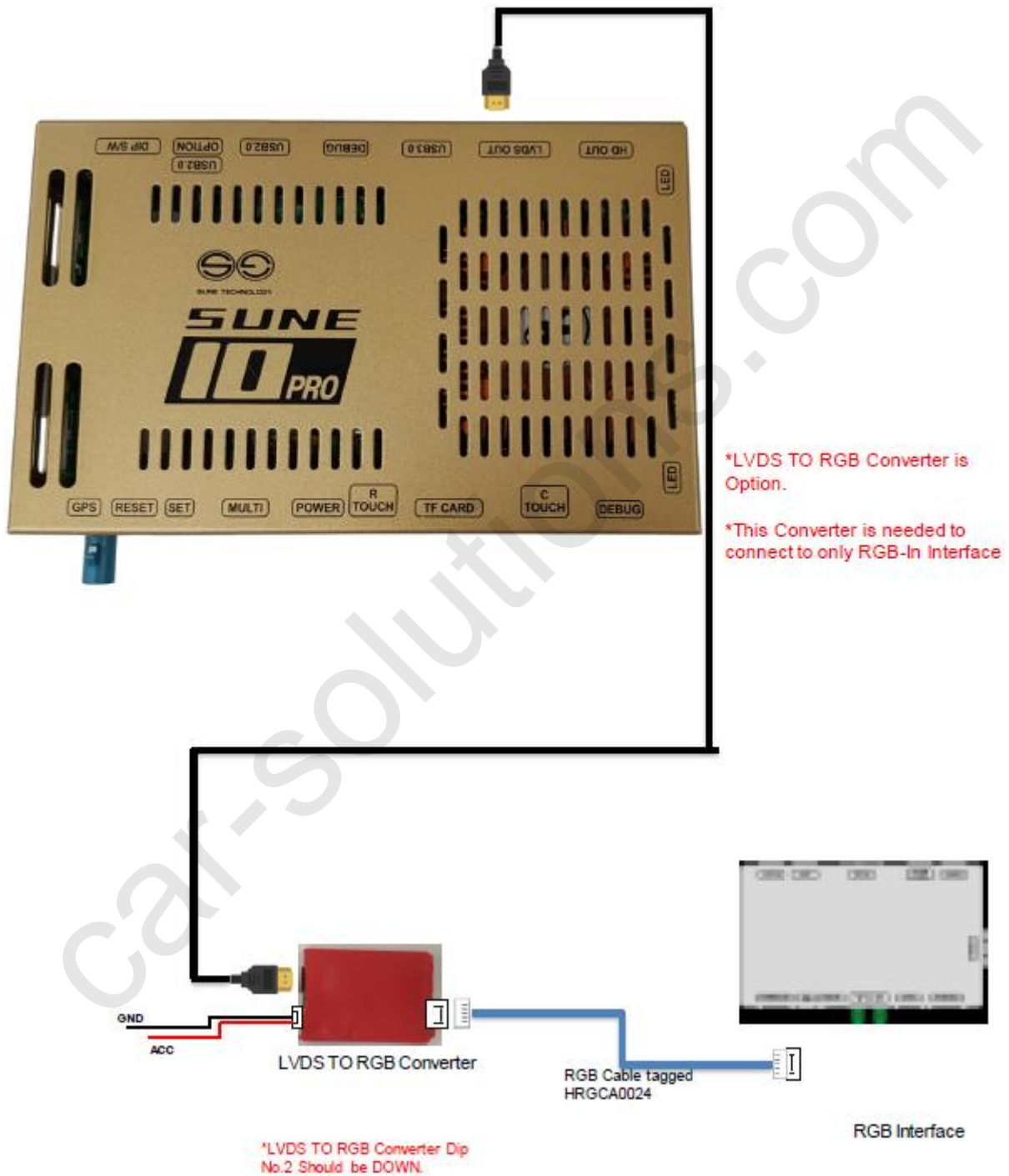
Resistive touch installation



UART touch installation



LVDS to RGB Converter installation



User Guide

Main Page

※ When SUNE10PRO is turned on, the main page is displayed as below



① **Status bar**

Dragging down the status bar to view the information in details

② **Main icons**

SUNE10PRO provides four main icons on the first page.

GPS and Multimedia icons operate as shortcuts to run the certain apps. (Users can set up the shortcut apps.)

③ **Apps**

Display the list of Android application

④ **Settings**

Change the settings

⑤ **Menu Bar : When dragging up the bottom, the menu bar comes.**



: Display and delete the apps from the recent operating apps list



: Go back to main page



: Go back to the previous page

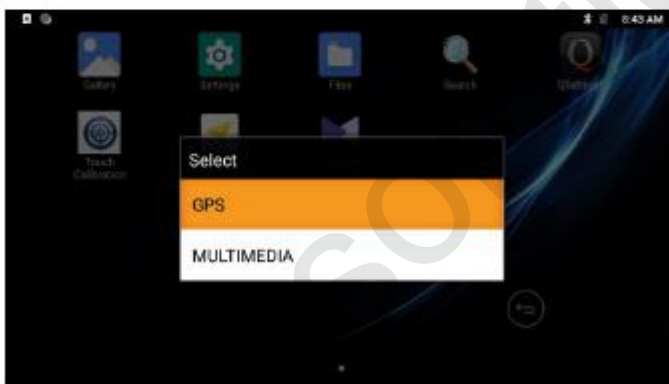


: Go to WiFi setting

Change Shortcut icons




1. Click the app with long press to make the shortcut on the main page.

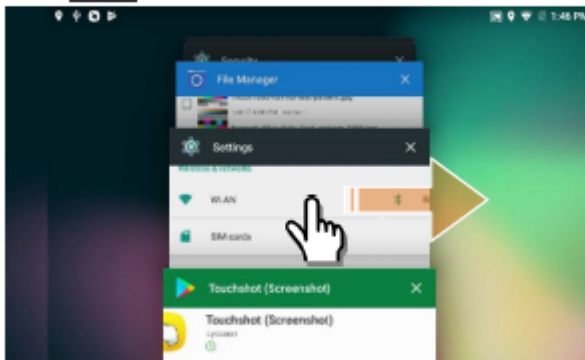


2. Select the place to put in between GPS and MULTIMEDIA.


Bottom menu bar


※ Menu bar helps to use SUNE10PRO in a easier way.

1.  (Multi key): Find, open and close recent apps

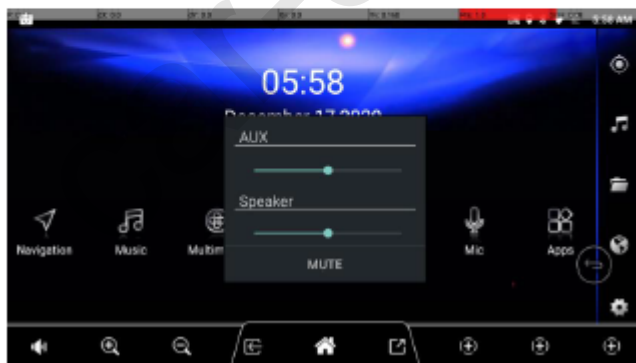


- Once the button is pressed, the recent apps will be displayed as shown on the left
- Replay the application when the application is clicked
- Remove the application on the recent apps by dragging left or right

2.  (Home key): (While running application) Go back to Home page
(Long press) play Google Now



3.  (back button): move to the previous page


4.  : Turn on/off or Volume up/down SUNE10 sound




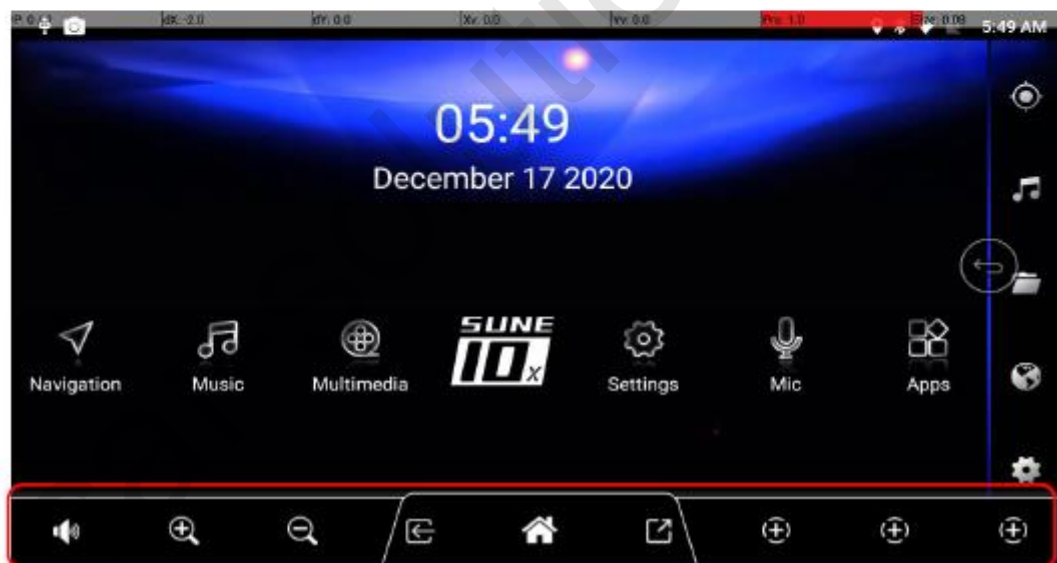
- click the button to open the new window as shown on the left
- AUX : Volume up/down Aux sound when the sound is connected to Car aux
- Speaker : Volume up/down the sound from the supplied speaker. In case of "Off", the supplied speaker will not have sound and only car aux will work
- MUTE : mute on/off

※ Menu bar helps to use SUNE10 PRO in a easier way.


5.   : On maps, these are the functions for zoom in and zoom out

6.  : Going to WiFi setting directly

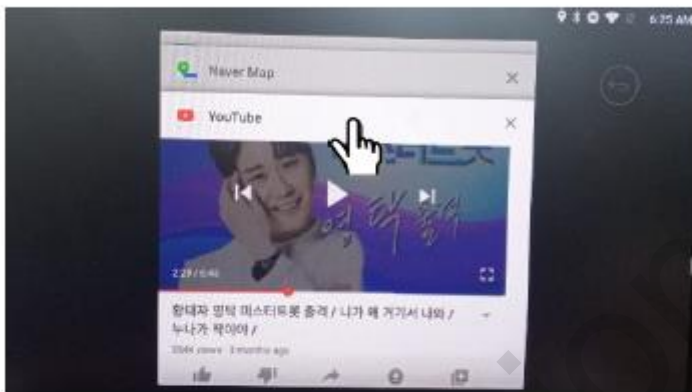
7.  : Going to Android setting directly



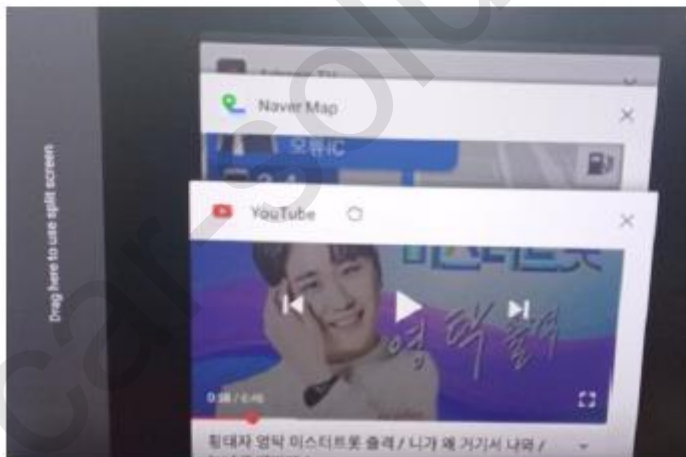
How to use PIP option

1.  Please tap this multi-key icon

2. Please select and hold the app which you want to make PIP.



3. On the left side, the message shows that 'Drag here to use split screen'.



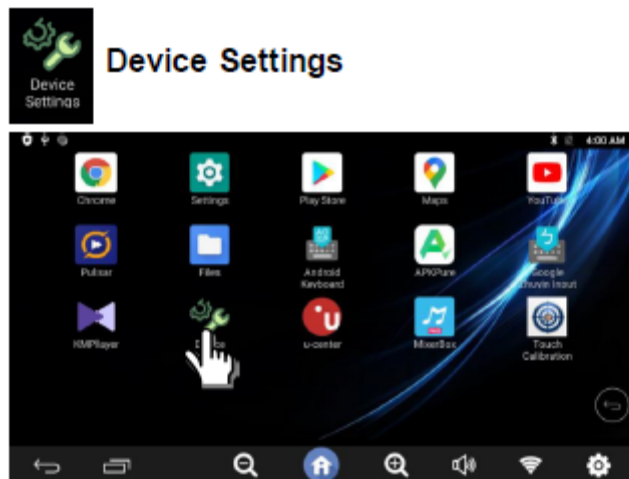
4. Please drag the app to the left side.



5. Then PIP screen will be operated without any problems.



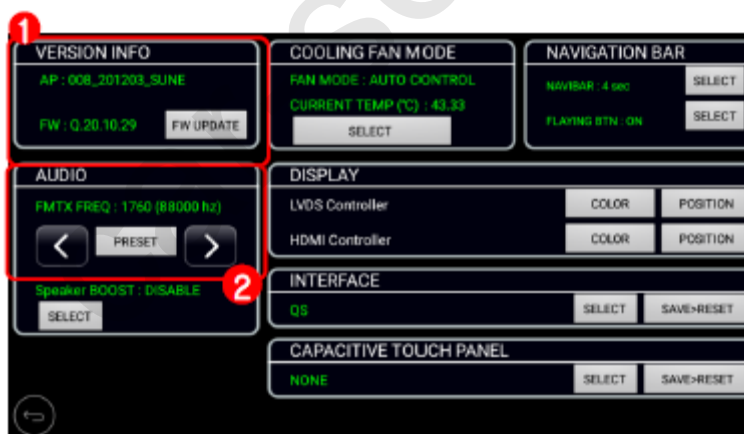
Settings



*Please tap Device Setting on App list.



*The Passwords are 0603.



1 *Can check AP and FW versions.

*Can do FW Update with plugging USB memory stick

*AP Update is automatically activated by plugging USB memory stick.

2 *being able to set up FMTX



Device Settings

VERSION INFO
AP : 008_201203_SUNE
FW : Q.20.10.29 FW UPDATE

COOLING FAN MODE
FAN MODE : AUTO CONTROL
CURRENT TEMP (°C) : 43.33
SELECT

NAVIGATION BAR
NAVIBAR : 4 sec SELECT
PLAYING BTN : ON SELECT

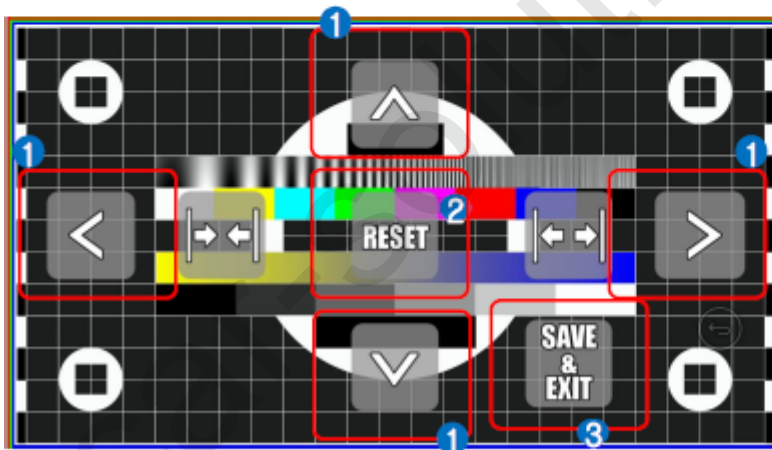
AUDIO
PMTX FREQ : 1760 (88000 hz)
< PRESET >
Speaker BOOST : DISABLE
SELECT

DISPLAY
LVDS Controller COLOR POSITION
HDMI Controller COLOR POSITION
INTERFACE
QS SELECT SAVE>RESET
CAPACITIVE TOUCH PANEL
NONE SELECT SAVE>RESET

3

* Video Setting :
adjustable
LVDS Picture

: Please tap the LVDS
Position button. Then
below picture shows on the
screen.



1 Move the position along with
the arrows.

2 Reset

3 Save & Exit : Saving the
changed setting values and going
out of LVDS setting page.



Device Settings

VERSION INFO
AP : 068_201203_SUNE
FW : Q.20.10.29 **FW UPDATE**

COOLING FAN MODE
FAN MODE : AUTO CONTROL
CURRENT TEMP (°C) : 43.33
SELECT

NAVIGATION BAR
NAVIBAR : 4 SEC **SELECT**
PLAYING BTN : ON **SELECT**

AUDIO
FM TX FREQ : 1760 (88000 hz)
< **PRESET** >
Speaker BOOST : DISABLE
SELECT

DISPLAY
LVDS Controller **COLOR** **POSITION**
HDMI Controller **COLOR** **POSITION**
INTERFACE
QS **SELECT** **SAVE>RESET**
CAPACITIVE TOUCH PANEL
NONE **SELECT** **SAVE>RESET**

4

* LVDS Picture color control

: Please tap the LVDS Color button. Then below picture shows on the screen.





Device Settings

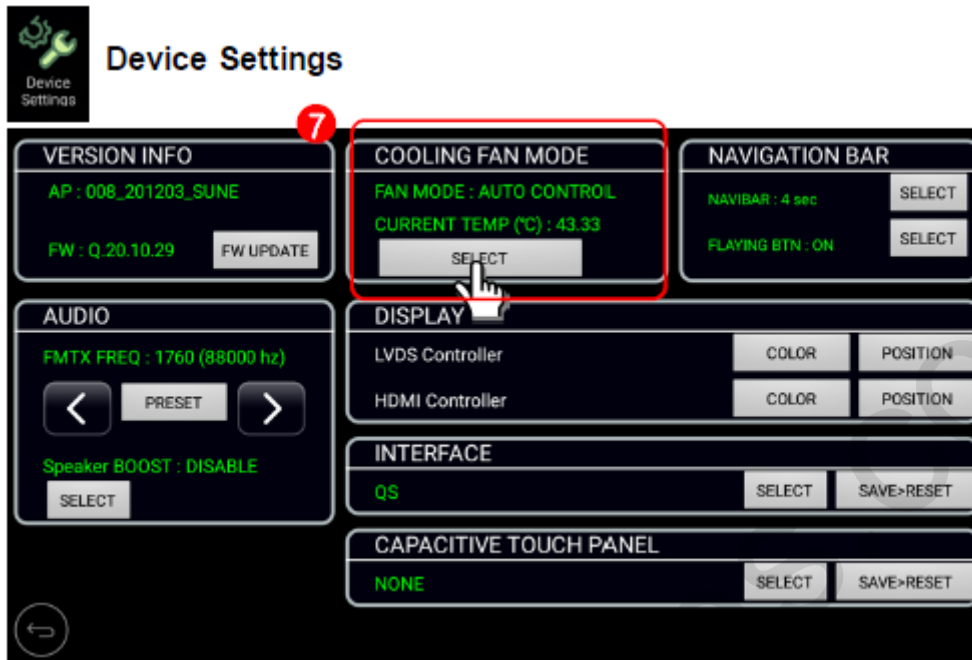
VERSION INFO AP : 068_201203_SUNE FW : Q.20.10.29 <input type="button" value="FW UPDATE"/>	COOLING FAN MODE FAN MODE : AUTO CONTROL CURRENT TEMP (°C) : 43.33 <input type="button" value="SELECT"/>	NAVIGATION BAR NAVIBAR : 4 SEC <input type="button" value="SELECT"/> PLAYING BTN : ON <input type="button" value="SELECT"/>
AUDIO FMTX FREQ : 1760 (88000 hz) <input type="button" value="PRESET"/> Speaker BOOST : DISABLE <input type="button" value="SELECT"/>	DISPLAY LVDS Controller <input type="button" value="COLOR"/> <input type="button" value="POSITION"/> HDMI Controller <input type="button" value="COLOR"/> <input type="button" value="POSITION"/> INTERFACE QS <input type="button" value="SELECT"/> <input type="button" value="SAVE>RESET"/> CAPACITIVE TOUCH PANEL NONE <input type="button" value="SELECT"/> <input type="button" value="SAVE>RESET"/>	

6

* HDMI Picture color control

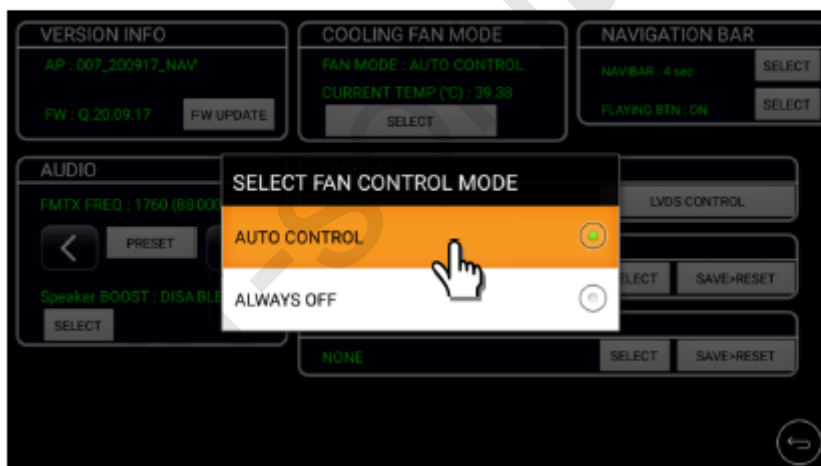
: Please tap the HDMI Color button. Then below picture shows on the screen.





7 *Cooling Fan Mode

: Please tap Mode select.





Device Settings

VERSION INFO AP : 008_201203_SUNE FW : Q.20.10.29 FW UPDATE	COOLING FAN MODE FAN MODE : AUTO CONTROL CURRENT TEMP (°C) : 43.33 SELECT	NAVIGATION BAR NAVIBAR : 4 sec SELECT PLAYING BTN : ON SELECT
AUDIO FMTX FREQ : 1760 (88000 hz) < PRESET > Speaker BOOST : DISABLE SELECT	DISPLAY LVDS Controller COLOR POSITION HDMI Controller COLOR POSITION	
INTERFACE QS SELECT SAVE>RESET		
CAPACITIVE TOUCH PANEL NONE SELECT SAVE>RESET		

8 *Interface Setting: Select Interface Touch Protocol .

VERSION INFO AP : 008_201203_SUNE FW : Q.20.10.29 FW UPDATE	COOLING FAN MODE FAN MODE : AUTO CONTROL CURRENT TEMP (°C) : 43.33 SELECT	NAVIGATION BAR NAVIBAR : 4 sec SELECT PLAYING BTN : ON SELECT
AUDIO FMTX FREQ : 1760 (88000 hz) < PRESET > Speaker BOOST : DISABLE SELECT	DISPLAY LVDS Controller COLOR POSITION HDMI Controller COLOR POSITION	
INTERFACE QS SELECT SAVE>RESET		
CAPACITIVE TOUCH PANEL NONE SELECT SAVE>RESET		

After selection, please tap Save → RESET button, in order to save the chosen Interface protocol.



Device Settings

VERSION INFO AP : 008_201203_SUNE FW : Q.20.10.29 <input type="button" value="FW UPDATE"/>	COOLING FAN MODE FAN MODE : AUTO CONTROL CURRENT TEMP (°C) : 43.33 <input type="button" value="SELECT"/>	NAVIGATION BAR NAVBAR : 4 sec <input type="button" value="SELECT"/> PLAYING BTN : ON <input type="button" value="SELECT"/>
AUDIO FMTX FREQ : 1760 (88000 hz) <input type="button" value="PRESET"/> Speaker BOOST : DISABLE <input type="button" value="SELECT"/>	DISPLAY LVDS Controller <input type="button" value="COLOR"/> <input type="button" value="POSITION"/> HDMI Controller <input type="button" value="COLOR"/> <input type="button" value="POSITION"/> INTERFACE QS <input type="button" value="SELECT"/> <input type="button" value="SAVE>RESET"/> CAPACITIVE TOUCH PANEL NONE <input type="button" value="SELECT"/> <input type="button" value="SAVE>RESET"/>	

9

9 *SPK BOOST: When Tap it, there are two options.

VERSION INFO AP : 007_200917_NAV FW : Q.20.09.17 <input type="button" value="FW UPDATE"/>	COOLING FAN MODE FAN MODE : AUTO CONTROL <input type="button" value="SELECT"/>	NAVIGATION BAR NAVBAR : 4 sec <input type="button" value="SELECT"/> PLAYING BTN : ON <input type="button" value="SELECT"/>
AUDIO FMTX FREQ : 1760 (88000 hz) <input type="button" value="PRESET"/> Speaker BOOST : DISABLE <input type="button" value="SELECT"/>	SELECT SPK BOOST MODE SPK BOOST DISABLE <input checked="" type="radio"/> SPK BOOST LV1 <input type="radio"/> SPK BOOST LV2 <input type="radio"/> SPK BOOST LV3 <input type="radio"/>	

When SPK BOOST Enable is selected, Speaker volume Gain will be increased.



Device Settings

VERSION INFO
AP : 008_201203_SUNE
FW : Q.20.10.29 **FW UPDATE**

COOLING FAN MODE
FAN MODE : AUTO CONTROL
CURRENT TEMP (°C) : 43.33
SELECT

NAVIGATION BAR
NAVBAR : 4 sec **SELECT**
PLAYING BTN : ON **SELECT**

AUDIO
FMTX FREQ : 1760 (88000 hz)
< **PRESET** >
Speaker BOOST : DISABLE
SELECT

DISPLAY
LVDS Controller **COLOR** **POSITION**
HDMI Controller **COLOR** **POSITION**

INTERFACE
QS **SELECT** **SAVE>RESET**

CAPACITIVE TOUCH PANEL
NONE **SELECT** **SAVE>RESET**

10 *NAVIGATION BAR: Able to select the time to hide the bottom menu bar

VERSION INFO
AP : 007_200917_NA
FW : Q.20.09.17 **FW UPDATE**

COOLING FAN MODE
FAN MODE : AUTO CONTROL
CURRENT TEMP (°C) : 43.33
SELECT

NAVIGATION BAR
NAVBAR : 4 sec **SELECT**
PLAYING BTN : ON **SELECT**

AUDIO
FMTX FREQ : 1760 (88000 hz)
< **PRESET** >
Speaker BOOST : DISABLE
SELECT

DISPLAY
LVDS CONTROL **COLOR** **POSITION**
HDMI CONTROL **COLOR** **POSITION**

INTERFACE
QS **SELECT** **SAVE>RESET**

CAPACITIVE TOUCH PANEL
NONE **SELECT** **SAVE>RESET**

SELECT NAVIGATION BAR AUTO HIDE TIME
2 sec
3 sec
4 sec
5 sec
6 sec
7 sec



Device Settings

VERSION INFO AP : 008_201203_SUNE FW : Q.20.10.29 <input type="button" value="FW UPDATE"/>	COOLING FAN MODE FAN MODE : AUTO CONTROL CURRENT TEMP (°C) : 43.33 <input type="button" value="SELECT"/>	NAVIGATION BAR NAVIBAR : 4 sec <input type="button" value="SELECT"/> FLYING BTN : ON <input type="button" value="SELECT"/>
AUDIO FMTX FREQ : 1760 (88000 hz) <input type="button" value="PRESET"/> Speaker BOOST : DISABLE <input type="button" value="SELECT"/>	DISPLAY LVDS Controller <input type="button" value="COLOR"/> <input type="button" value="POSITION"/> HDMI Controller <input type="button" value="COLOR"/> <input type="button" value="POSITION"/> INTERFACE QS <input type="button" value="SELECT"/> <input type="button" value="SAVE>RESET"/> CAPACITIVE TOUCH PANEL NONE <input type="button" value="SELECT"/> <input type="button" value="SAVE>RESET"/>	

11 *: Able to select the time to hide Flying Back button

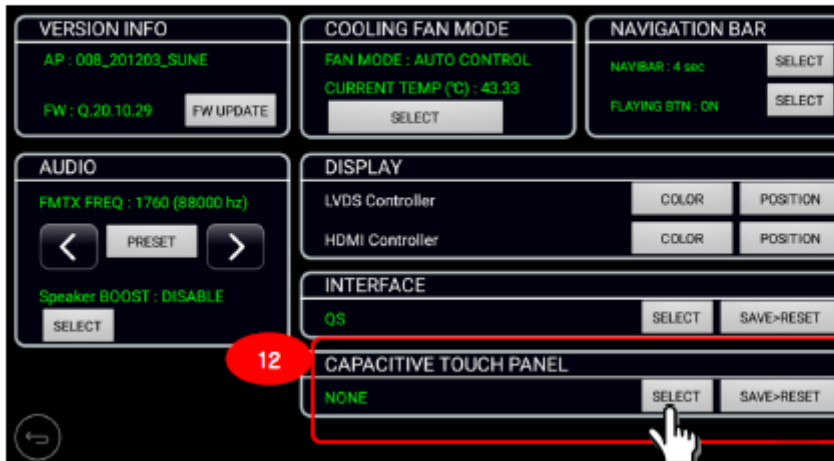
VERSION INFO AP : 007_200917_NAVI FW : Q.20.09.17 <input type="button" value="FW UPDATE"/>	COOLING FAN MODE FAN MODE : AUTO CONTROL CURRENT TEMP (°C) : 43.33 <input type="button" value="SELECT"/>	NAVIGATION BAR NAVIBAR : 4 sec <input type="button" value="SELECT"/> FLYING BTN : ON <input type="button" value="SELECT"/>
AUDIO FMTX FREQ : 1760 (88000 hz) <input type="button" value="PRESET"/> Speaker BOOST : DISABLE <input type="button" value="SELECT"/>	DISPLAY LVDS Controller <input type="button" value="COLOR"/> <input type="button" value="POSITION"/> HDMI Controller <input type="button" value="COLOR"/> <input type="button" value="POSITION"/> INTERFACE QS <input type="button" value="SELECT"/> <input type="button" value="SAVE>RESET"/> CAPACITIVE TOUCH PANEL NONE <input type="button" value="SELECT"/> <input type="button" value="SAVE>RESET"/>	

SELECT FLYING BUTTON AUTO HIDE TIME

- ALWAYS ON ☒
- 2 sec ☐
- 3 sec ☐
- 4 sec ☐
- 5 sec ☐
- 6 sec ☐



Device Settings



VERSION INFO
AP : 008_201203_SUNE
FW : Q.20.10.29 FW UPDATE

COOLING FAN MODE
FAN MODE : AUTO CONTROL
CURRENT TEMP (°C) : 43.33
SELECT

NAVIGATION BAR
NAVBAR : 4 sec SELECT
PLAYING BTN : ON SELECT

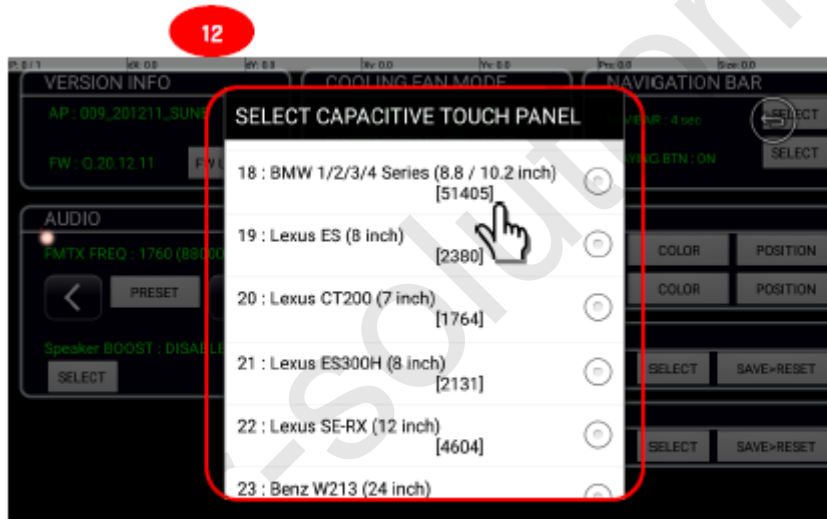
AUDIO
FMTX FREQ : 1760 (88000 hz)
< PRESET >
Speaker BOOST : DISABLE
SELECT

DISPLAY
LVDS Controller COLOR POSITION
HDMI Controller COLOR POSITION

INTERFACE
QS SELECT SAVE>RESET

CAPACITIVE TOUCH PANEL
NONE SELECT SAVE>RESET

*: To select Cap touch model on the list



SELECT CAPACITIVE TOUCH PANEL

- 18 : BMW 1/2/3/4 Series (8.8 / 10.2 inch) [51405] ☐
- 19 : Lexus ES (8 inch) [2380] ☒
- 20 : Lexus CT200 (7 inch) [1764] ☐
- 21 : Lexus ES300H (8 inch) [2131] ☐
- 22 : Lexus SE-RX (12 inch) [4604] ☐
- 23 : Benz W213 (24 inch) ☐

After selection, please tap Save → RESET button, in order to save it.

Touch Calibration



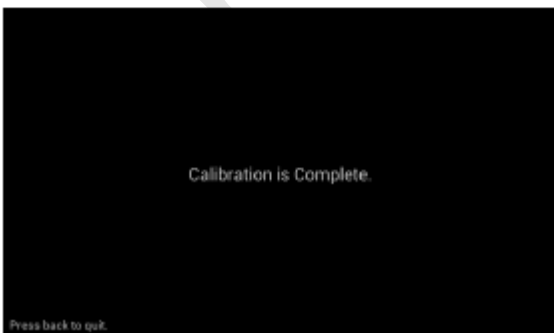
App list ► Touch Calibration



- Touch Calibration.



- Press each target position by a finger.

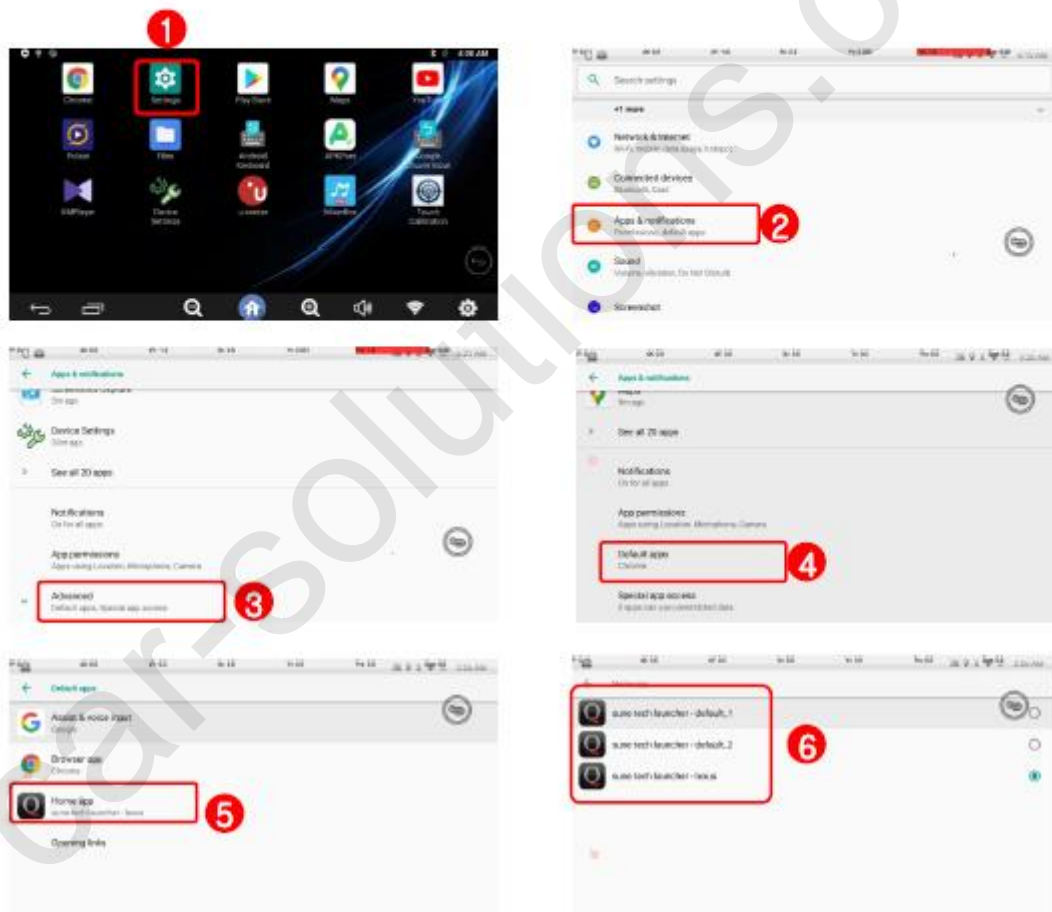


- Completed.

Change UI



For now 3 model UI, will add more infuture



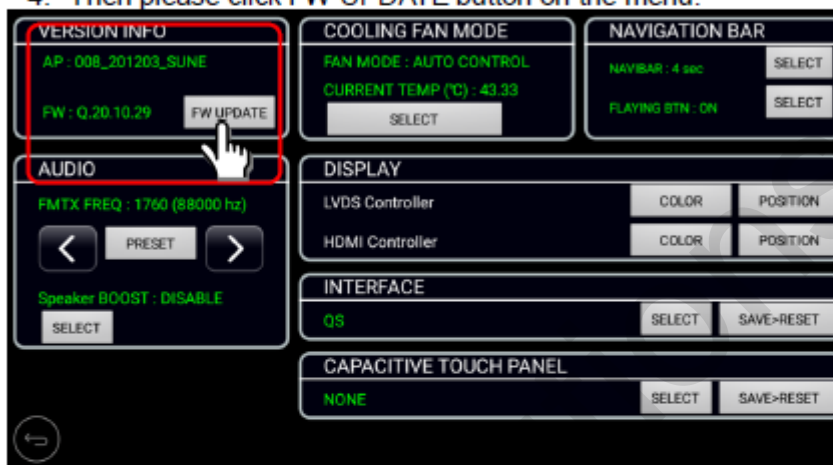
How to upgrade firmware

1. Please copy and paste **FW.QVL** on USB memory stick root.
2. Please connect the USB memory stick to SUNE10 PRO USB port. (Please don't connect it to OPTION port.)

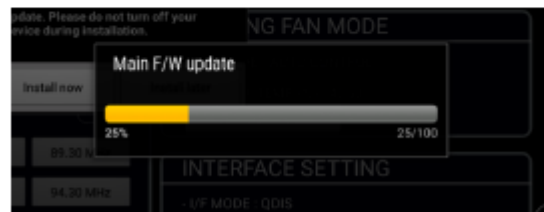
3. Please go to Device settings.



4. Then please click FW UPDATE button on the menu.



5. The pop up screen comes. Then please tap 'install now'.



6. The progress bar comes. After finishing the upgrade, SUNE10 PRO will be rebooted by itself.