PORSCHE CAYENNE 09

(PCM3.0)

Specification & Installation

Contents

1.1 Main specification

1. Input Spec. (MULTI VIDEO INTERFACE)
    - -. 3 x A/V Input (External video source).
    - -. 1 x CVBS(REAR CAMERA) Input. (Rear camera source)
    - -. 1 x Analog RGB Input (Navigation System output)
    - -. 1 x LCD Input (Car system Input)
    - -. 1 x Cayenne Input

2. Output Spec.
    - -. 1 x Cayenne Output
    - -. 4 x Audio Select (12V power comes out from 4wires of cable by video, Navi mode)

3. Power Spec.
    - - Input Power : 10VDC ~ 16VDC
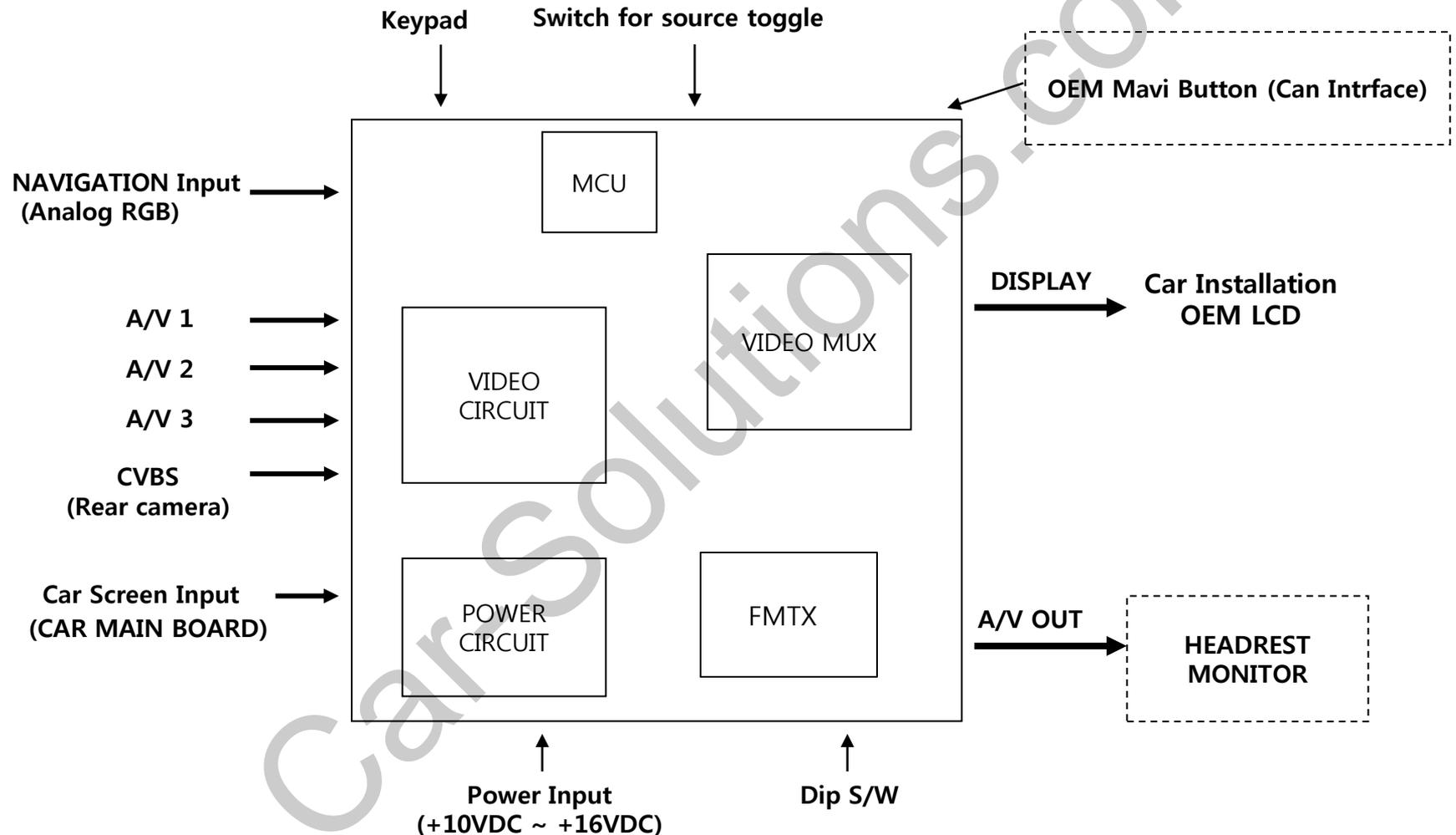   - - Consumption Power : 12WATT, Max

4. Switch Input mode
    - - Input Video MUTE Function : Possible to make each input mute by operating Dip S/W.
    - - Possible to switch Input mode by a Keypad
    - - Possible to switch Input mode by a toggle button

1.2 Features

-Improved quality

-Auto detection for NTSC, PAL signals

-AV source switching by original button

-FMTX Module Built in.
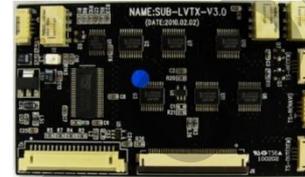
-Possible to control displayed external NAVI, AV image

1.3 System diagram

Keypad

Switch for source toggle

OEM Mavi Button (Can Intrface)

NAVIGATION Input
(Analog RGB)

MCU

A/V 1

A/V 2

A/V 3

CVBS
(Rear camera)

VIDEO CIRCUIT

VIDEO MUX

DISPLAY → Car Installation
OEM LCD

Car Screen Input
(CAR MAIN BOARD)

POWER CIRCUIT

FMTX

A/V OUT → HEADREST MONITOR

Power Input
(+10VDC ~ +16VDC)

Dip S/W

1.4 Components

LVDS STANDARD VIDEO INTERFACE

Model : LVTX - STD - V1.0
Product Code : LVSTD - 0901 - 000

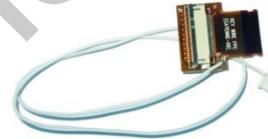POWER MODE RGB(IN) A/V(IN/OUT)

FPC cable * 1ea
(FPCABL0002)

Sub board * 1ea
(QCPASS0041)

Extension cable * 2ea
(HTOUCH0001)
(HTOUCH0003)

TOUCH cable * 1ea
(HTOUCH0002)

Button cable * 1ea
(FPCABL0003)

FFC cable * 2ea
(FFCABL0006)

POWER cable (10P) * 1ea
(HPOWER0005)

Mode cable * 1ea
(HARETC0001)

RGB cable * 1ea
(HRGBIC0002)

LVDS cable * 1ea
(HLVDSC0006)

AV cable * 1ea
(HAVCAB0002)

IR cable (8P) * 1ea
(HIRCAB0003)

Remote control * 1ea
(REMOTE0001)

OR

Ground cable * 1ea
(HGROUN0001)

Keypad * 1ea
(SMTASY0063)

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1.5 Exterior

⑤　⑥　⑦　⑧

Dimension

Horizontal length 155mm
Vertical length 93mm
Height 20mm

① POWER

② MODE

③ RGB IN

④ AV IN/OUT

⑤ LED

⑥ DIP S/W

⑦ KEYPAD/IR

⑧ LCD OUT

LVDS STANDARD VIDEO INTERFACE

Model : LVTX - STD - V1.0
Product Code : LVSTD - 0901 - 000

LED　DIP S/W　KEYPAD　LCD OUT

POWER　MODE　RGB(IN)　A/V(IN/OUT)

①　②　③　④

2.1 DIP switch

#PIN	Function	DIP S/W selection
1	RGB INPUT MUTE	ON : Skipping RGB Mode OFF : RGB Display
2	A/V 1 MUTE	ON : Skipping A/V 1 OFF : A/V1 Display
3	A/V 2 MUTE	ON : Skipping A/V 2 OFF : A/V2 Display
4	A/V 3 MUTE	ON : Skipping A/V 3 OFF : A/V3 Display
5		N.C
6		N.C
7	When to choose rear mode (ON : CVBS4, OFF : MAIN)	
8	To select original NAVI	ON : Changing mode ; Main-Main-NAVI-AV1~3 (This is for original Navi) OFF : Changing mode ; Main-NAVI-AV1~3

※DIP S/W Use Example

-. Use Input Mode : A/V2, A/V3
-. Use original Navigation

▷ DIP S/W : 1,2 -→ ON (INPUT MODE SKIP)
▷ DIP S/W : 3 -→ OFF (enable A/V3)
▷ DIP S/W : 4 -→ OFF (enable A/V3)
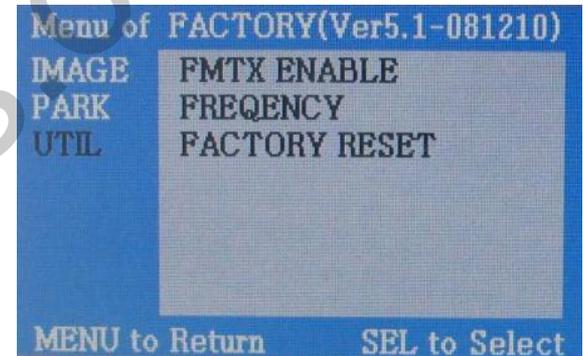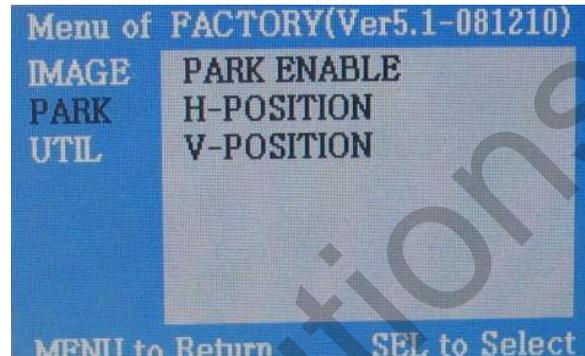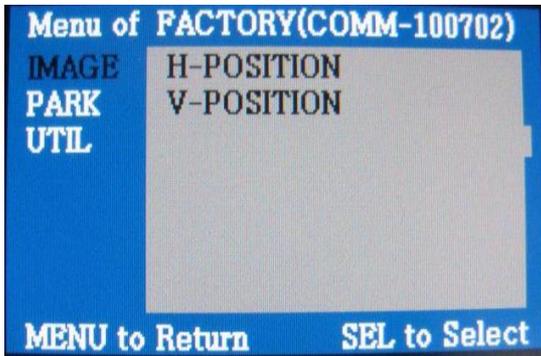▷ DIP S/W : 5,6,7 -→ OFF
▷ DIP S/W : 8 -→ ON

※ Please make sure to disconnect the power cable of the interface and reconnect
the power cable again to apply the dip switch setting whenever changing DIP switch.
Otherwise, DIP switch setting will not be applied.

2.2 Factory mode

· **Factory Mode**
  ① Press 'UP(▲)' button of supplied key pad for 2 sec.
  ② Press ▲ → ▼ → ▲ →MENU buttons in order.

IMAGE
- H_POSITION : Horizontal movement of the OSD window
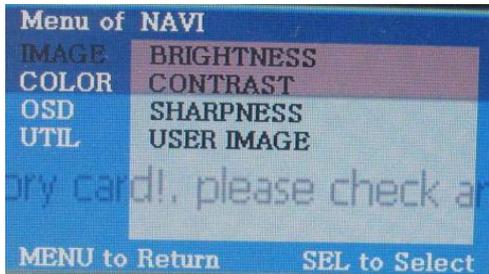-V_POSITION : Vertical movement of the OSD window

PARK
- PARK ENABLE : Setup of rear view parking guide line
- H_POSITION : Horizontal movement of the OSD window
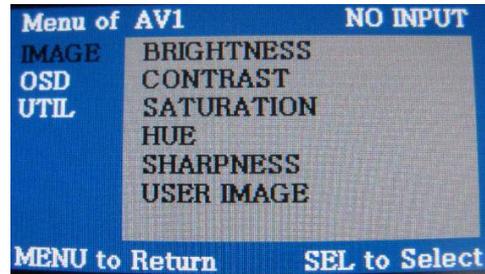-V_POSITION : Vertical movement of the OSD window

UTIL
 - FMTX ENABLE : FMTX setting
 - FREQENCY : Adjust frequency
 - FACTORY RESET : To reset all the values
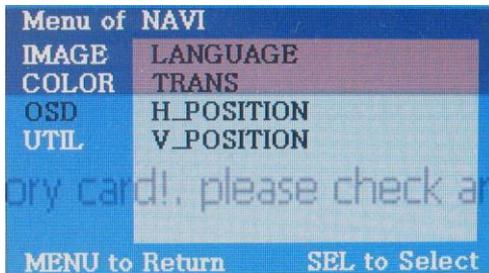
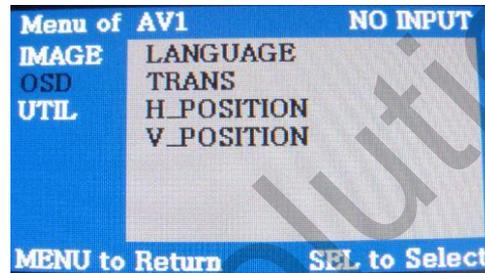# 2.3 OSD (on screen display)

Analog RGB Mode

Video Mode

IMAGE
- BRIGHTNESS
- CONTRAST
- SATURATION
- HUE
- SHARPNESS
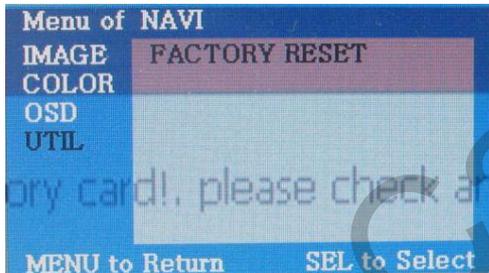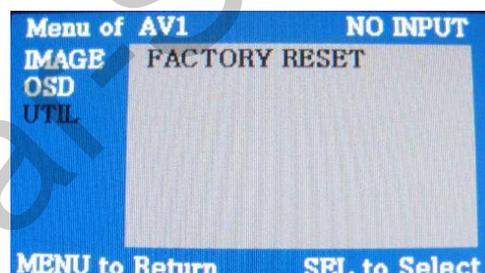 USER IMAGE : To choose a option among 4 prepared color shade.

Analog RGB Mode

Video Mode

OSD
- LANGUAGE : Choosing OSD language while using Touch OSD (English, Chinese only)
- TRANS
: Transparency control of the OSD background
- H_POSITION
: Horizontal movement of the OSD window
- V_POSITION
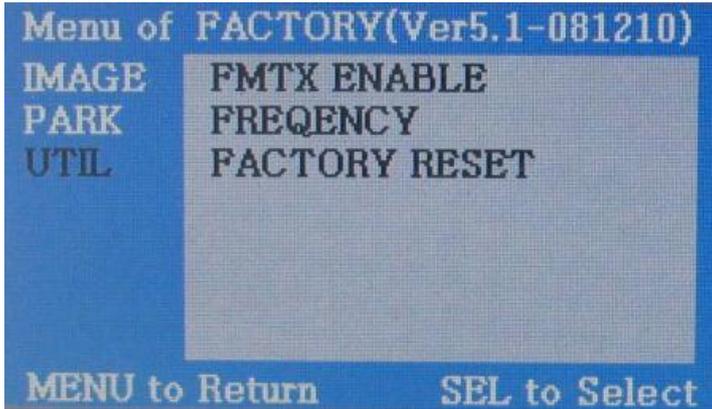: Vertical movement of the OSD window

Analog RGB Mode

Video Mode

UTIL
- FACTORY RESET : To reset all the values
(To reset of Navigation, AV individually)

2.4 FMTX Setting

Factory Default : FMTX USE – ON, FREQENCY – 88.2MHz

-Activate the Factory Mode operated with pressing ▲ → ▼ → ▲ → MENU buttons on the keypad in sequence.
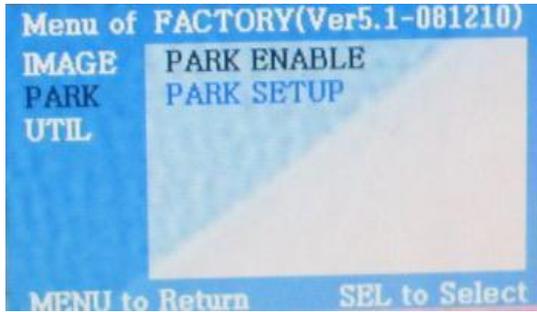

-Set "FM-TX USE" to "ON" as shown left. (Default -ON) Control the frequency by "▲", "▼" buttons on the Remote control. At the bottom, you can see present frequency and control it from 87.5MHZ to 108MHZ. (1MHZ per each time to press)
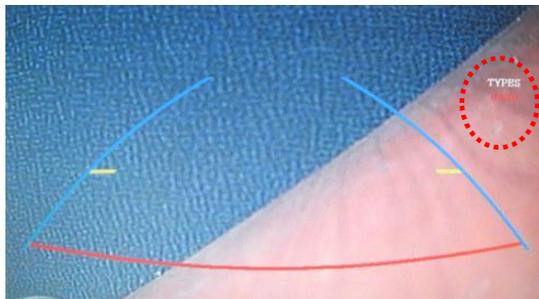
※ **If you do not want this function, kindly set "FM-TX USE" to "OFF". (Use ▲, ▼ buttons on the Remote control)**

2.5 Parking guide line

Factory Default -Types:0, H_Pos:50, V_Pos:120

① Register the value needed on the "PARK SETUP" with pressing "OK" button on the Remote control in the PARK section as shown left. Then, you can control distance between 2 parallel lines.
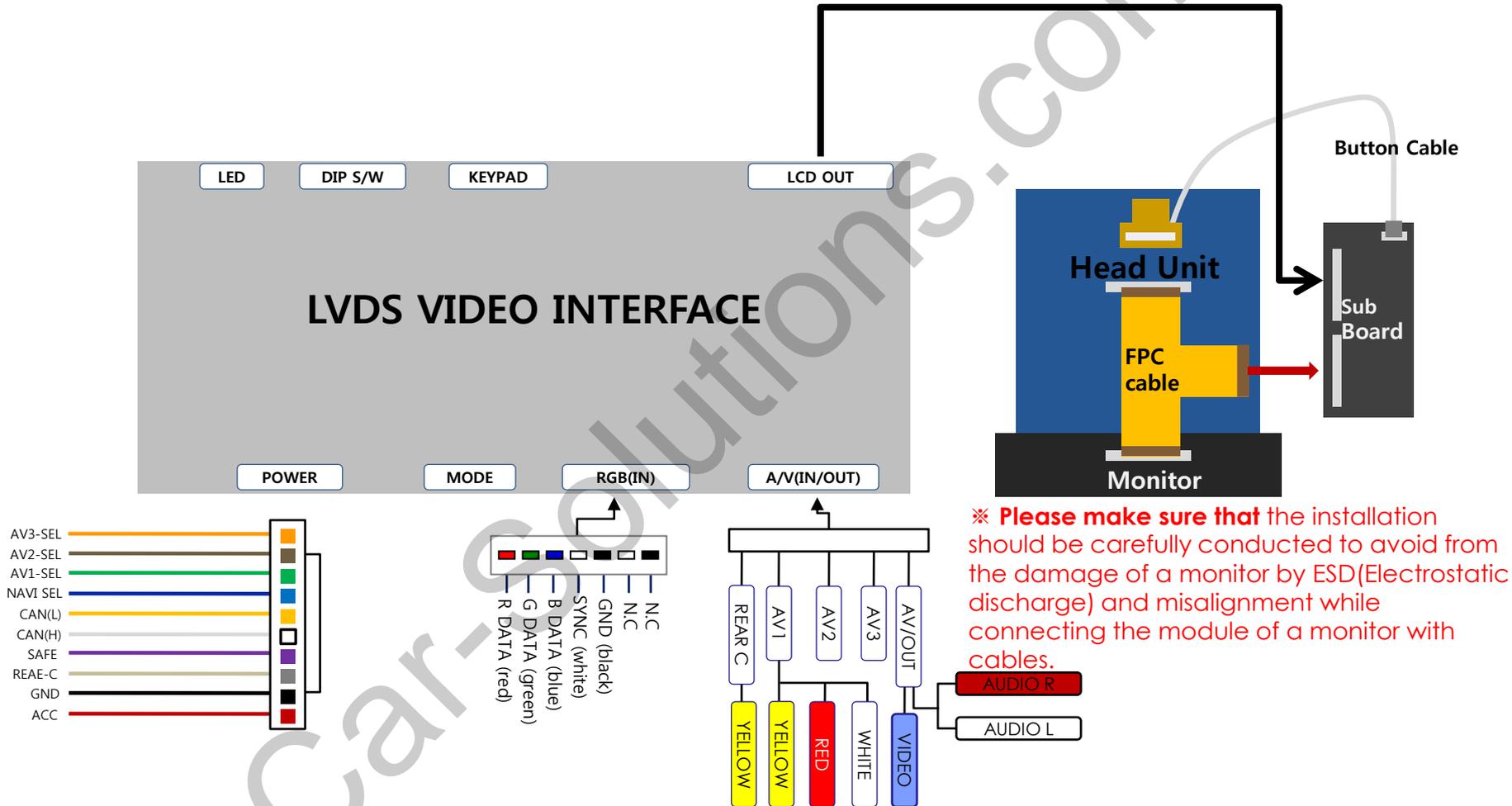

② There are 4 steps of parallel lines distance, the distance is controlled by ▲, ▼ buttons in the Remote control. After controlling, must press "OK" button to save this status.
(You can see present status at the right in the screen)

③ After Step. ② , press ▲, ▼ buttons on the Remote control to control left, right position with pressing 'OK' button, and then you can control up, down position. (Able to control 0~255)

※ If you do not this function, kindly set 'PARK ENABLE" to 'OFF'.

3.1 Installation diagram

LED **DIP S/W** **KEYPAD** **LCD OUT**

LVDS VIDEO INTERFACE

POWER **MODE** **RGB(IN)** **A/V(IN/OUT)**

AV3-SEL
AV2-SEL
AV1-SEL
NAVI SEL
CAN(L)
CAN(H)
SAFE
REAE-C
GND
ACC

R DATA (red)
G DATA (green)
B DATA (blue)
SYNC (white)
GND (black)
N.C
N.C

REAR C
AV1
AV2
AV3
AV/OUT

YELLOW
YELLOW
RED
WHITE
VIDEO

AUDIO R
AUDIO L

Button Cable

Head Unit

Sub Board

FPC cable

Monitor

※ **Please make sure that** the installation should be carefully conducted to avoid from the damage of a monitor by ESD(Electrostatic discharge) and misalignment while connecting the module of a monitor with cables.

3.2 Cautions on Installation

- Ignition key should be taken off before starting installation, interface power connection must be the last step in installation.

- Power cable should be separated when connecting interface.

- Should be no any electronic devices or magnetic pole around installation place.

- All steps of installation should be done by well-trained specialist.

- Dismantling without manufacturer's permission can not be guaranteed, (No permission to break attached label on the board.)

- Kindly check all parts are in the box, when receiving the product, if anything missing, inform to the supplier or manufacturer.

- According to our sales policy, any problems caused by user's mistake, careless can not be guaranteed.
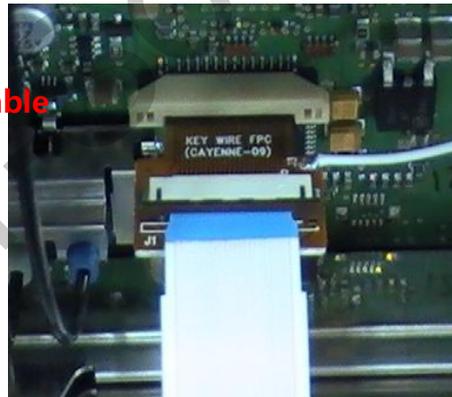
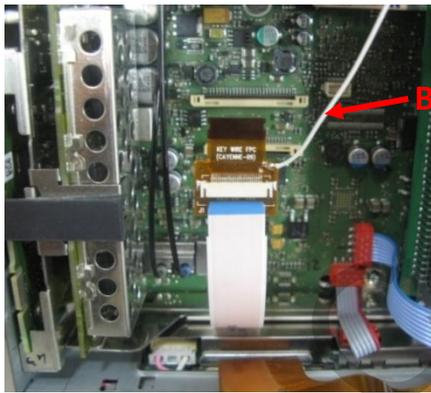- It may not work on a camera with 12V

3.3 Installation

1. Cut the original FFC cable

Before   After
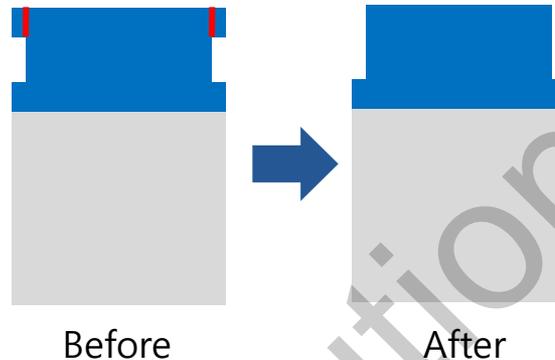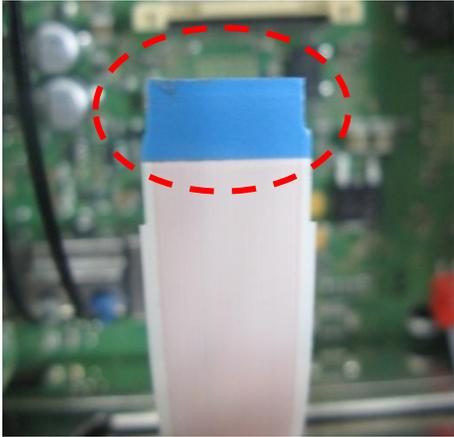
Trim edges of the original FFC cable which is connected between head unit board and monitor as shown left. (This is to connect the offered Button cable, be sure not to damage PIN on the cable.)
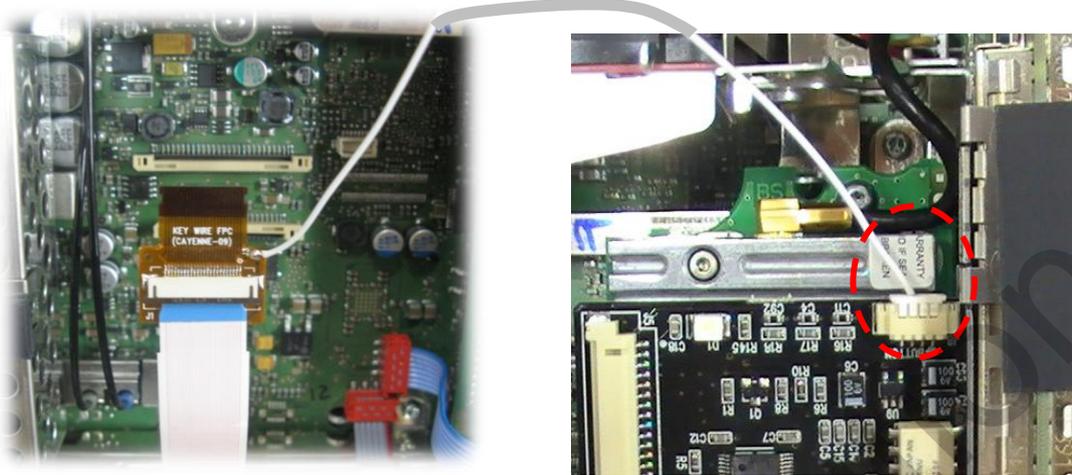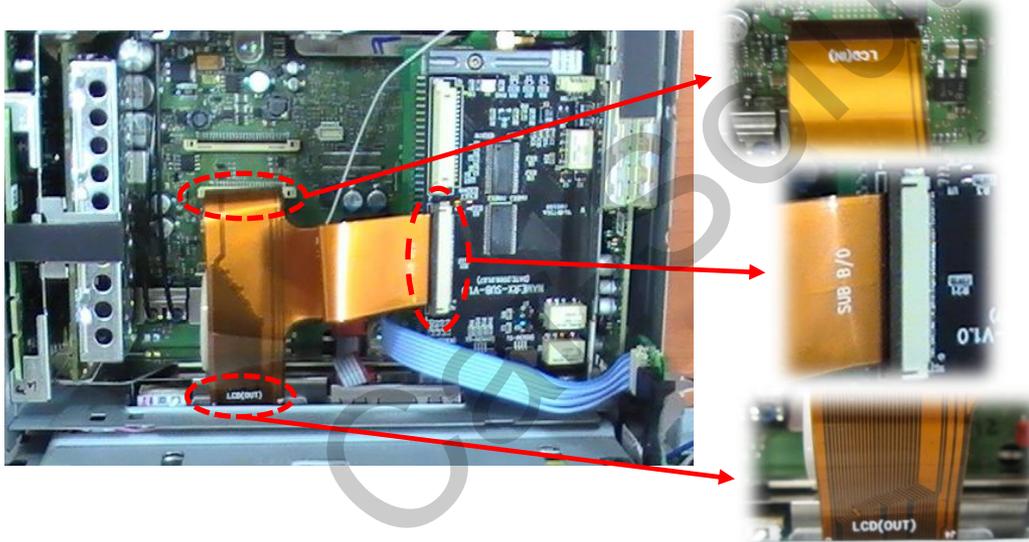
2. Connect the button cable to FFC cable

Button cable

Connect the cut FFC cable in previous step to offered Button cable and connect this button cable to Head unit as shown left.

3.3 Installation

3. Connect the button cable to Sub-Board & Remove the original FPC cable

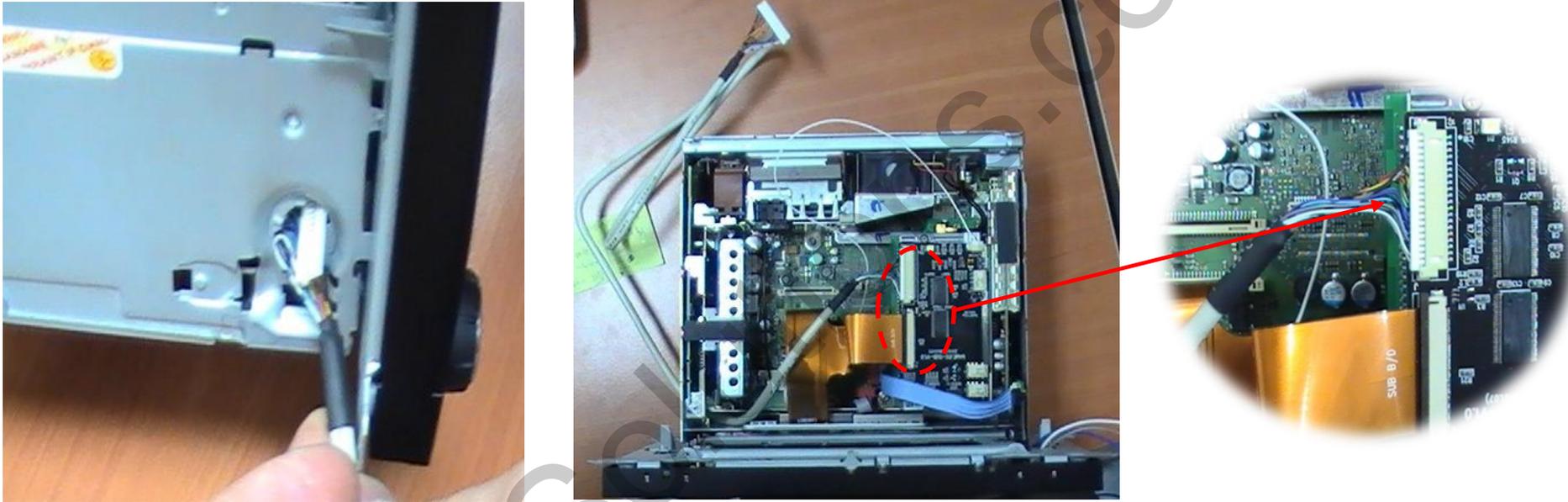Connect the wire from the Button cable to the sub-board as shown left.

Remove the original FPC cable, connect the offered T-shaped FPC cable to Head unit and the offered Sub-board as shown left.
Be sure not to touch the opposite side.
(It is possible to damage on Head unit when you touch the opposite side!)

3.3 Installation

4. Connect Cayenne Board to Sub-Board

Put LCD cable into Head unit, connect sub-board and interface board.

4. Troubleshooting

Q. I can not switch A/V sources.
A. Check IR or Ground cable connection. Check LED lamps in the interface, if it is not on, check power cable.

Q. All I got on the screen is black.
A. Check second LED lamp of the interface is on, if not, check A/V sources connected are working well.
   (Second lamp indicates AV sources connected works well.) Check interface connection has been done well.

Q. Displayed image color is not proper. (too dim or not suitable color)
A. Try to select "INITIAL" in OSD menu, if it does not work, inform the manufacturer.)

Q. Rear camera image does NOT appear.
A. Set DIP switch #7 in "ON"

Q. Unwanted A/V mode is displayed. (A/V source switching order : OEM->RGB->AV1->AV2->AV3)
A. Check DIP Switch Setting.

Q. OEM image is not displayed.
A. Check interface's LCD In/Out cable connection. If the status keeps on, inform the manufacturer.

Q. Screen only displays white like left picture.
A. Check LCD out cable is connected well, if this status keeps, inform the manufacturer.