

Installation Manual

Multimedia Interface for Volvo XC90



Manual Date : 2020.11

• Specification

Car compatibility: Volvo XC90, S90 2017

Components : Interface* 1ea, Sub board*1ea

Multimedia interface Input/output spec

Input : Analog RGB*1 (Navigation), HDMI*1, A/V*2,
CVBS (Rear camera)*1,
Output : To LCD*1

Power spec

Input power : 8VDC ~ 18VDC
consumption : 5WATT

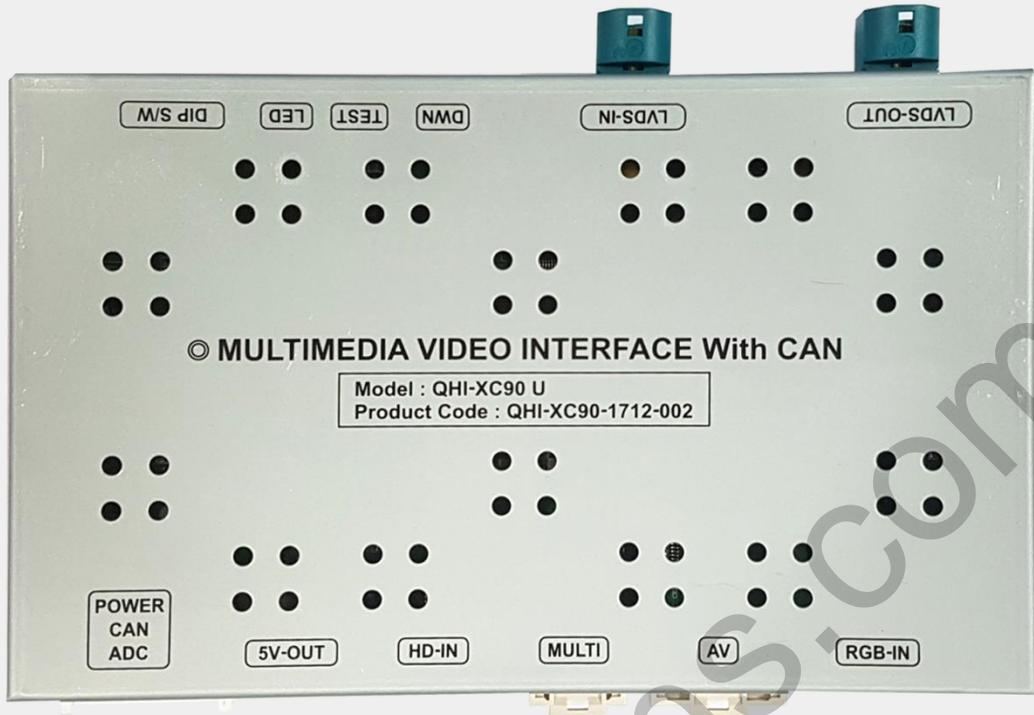
Switch input mode

- External video sources skip function : able to control input videos on and off via DIP switches.
- Able to switch videos via the remote, button switch, and original buttons.
- Able to detect the rear view camera (back up camera) via Lamp or CAN.

• Features

- Control external videos sources (DVD, DTV) via Multi Media Touch
- Adjust external videos screen position
- The improved Screen Display (User Friendly Interface)
- Switch modes via OEM button
- Supply power for rear view camera (Back up camera)
- Assist your parking via Dynamic PAS (Parking Assistance System), moving parking line according movement of steering wheel

• Product Exterior



• Components



Power * 1ea



LCD * 2ea
(HLCDCA0017)



RGB * 1ea
(HRGBCA0026)



MULTI * 1ea
(HARETC0240)



AV * 1ea
(HAVCAB0056)



LCD Extension * 1ea
(QCPASS0638)



REAR * 1ea
(HARETC0002)



BUTTON * 1ea
(HARETC0001)

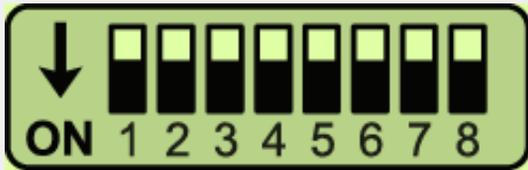


IR * 1ea
(HIRCAB0002)



Remote * 1ea
(REMOTE0001)

DIP Switch Settings



*** ON: DOWN / OFF: UP**

Please make sure to disconnect the power cable of interface and reconnect to apply dip switch setting whenever changing DIP switch.

PIN	FUNCTION	Dip S/W SELECT
1	RGB	OFF : RGB Mode ON : RGB Mode Skip
2	HDMI	OFF : HDMI Mode ON : HDMI Mode Skip
3	AV1	OFF : AV1 Mode ON : AV1 Mode Skip
4	AV2	OFF : AV2 Mode ON : AV2 Mode Skip
5	Front Camera	OFF : Ext. Front Camera Mode ON : OEM Front Camera Mode
6	No Use (OFF)	
7	Rear Camera	OFF : OEM Rear Camera Mode ON : Ext. Rear Camera Mode
8	No Use (OFF)	

Remote Control



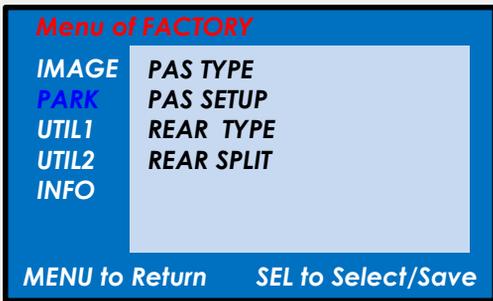
Key	FUNCTION
POWER & PIP	N/C
MENU	Activating OSD menu
OK	Making a selection, changing image display
▲	Moving upward
▼	Moving downward
◀	Moving leftward (If you press this button 2 seconds long, you can access the factory mode)
▶	Moving rightward (If you press this button 2 seconds long, you can reset all the data about user environment)

Factory Settings



IMAGE

H-POSITION/V-POSITION Setting



PARKING

PAS TYPE:

Select parking line type.

NOT USED: Do not use parking line

PAS ON: Use Flexible Parking Lines

PAS OFF: Use fixed parking line

PAS SETUP:

You can move the position of parking line.

REAR TYPE:

Choose rear camera recognition.

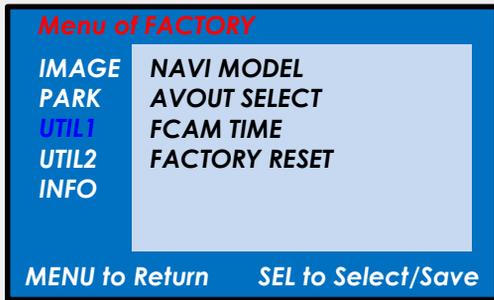
CAN: Detecting the rear view camera by CAN signal. (Installer must connect "CAN" cable of the power cable to the "CAN" cable of the car)

LAMP: Detecting the rear view camera via "Grey Rear" wire. (Installer must connect "Rear-C" cable of the power cable to the rear lamp of the car)

REAR SPLIT:

(RCAM ONLY, RCAM+Ori.CAM, RCAM+Ori.PDC)

Factory Settings



UTIL1

NAVI MODEL:

Android, Car-play, Navigation Model Setting

AUDIO OUT:

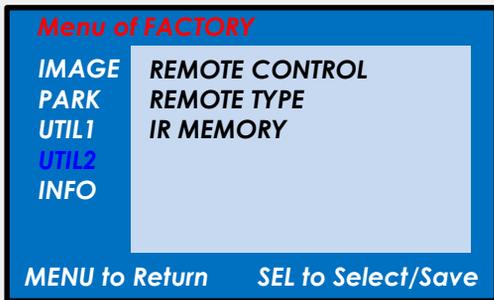
Select audio channel transmitted through AUX (Default/AV1/AV2)

FCAM TIME:

Front Camera Display Setting

FACTORY RESET:

Factory mode reset (YES/NO)



UTIL2

REMOTE CONTROL:

Able to control UI remote by touch (OFF/ON)

REMOTE TYPE:

Able to use remote control on DVD, DTV by selecting "User" after IR memory registered

IR MEMORY:

Register IR memory of remote control for DTV, DVD(AV1/AV2)



INFO

System version information

• OEM button



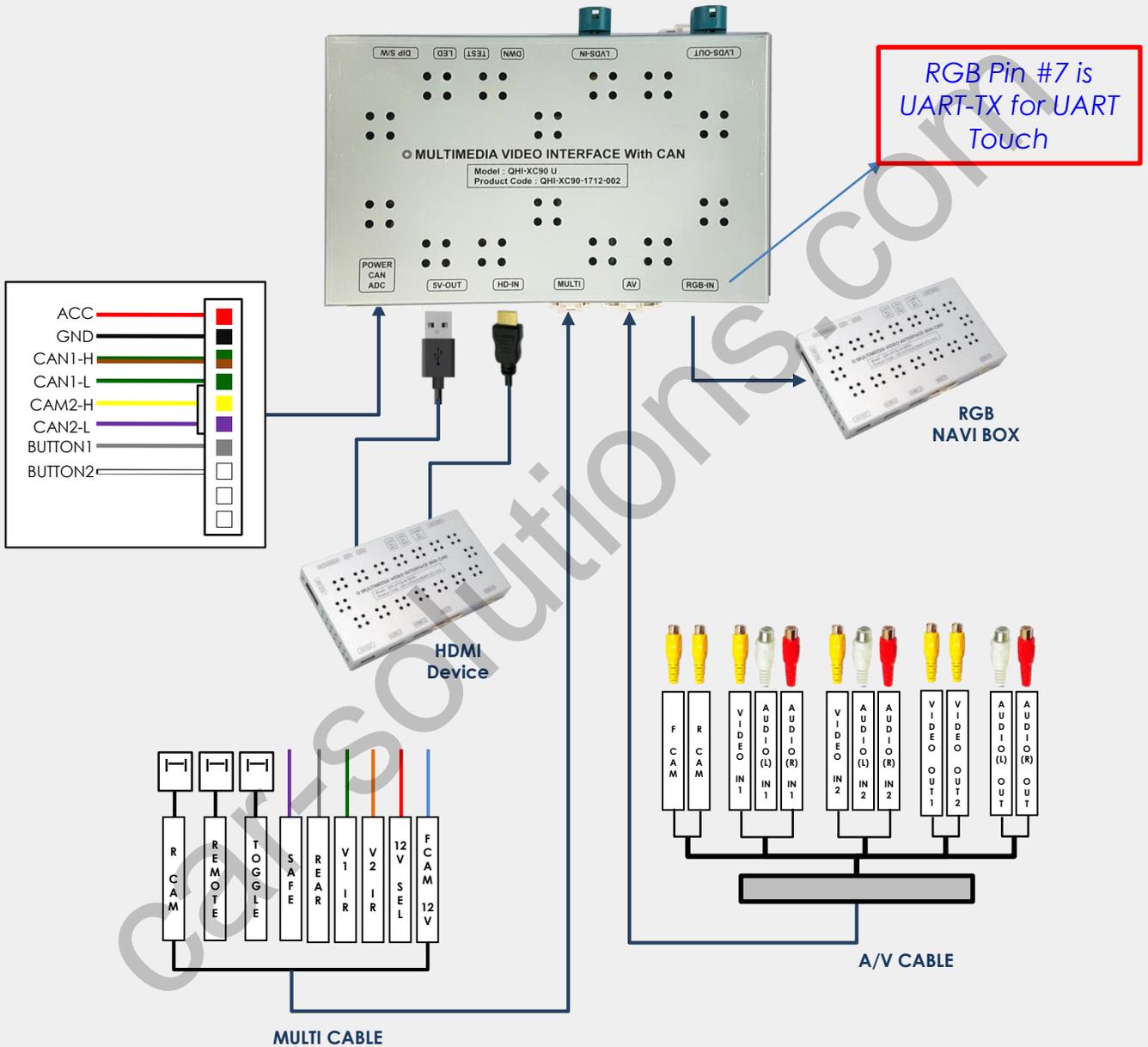
※ Press Home button to switch the mode

* Press the button twice :

Mode switch (RGB → HDMI1 → A/V1 → A/V2 → F-CAM → OEM)

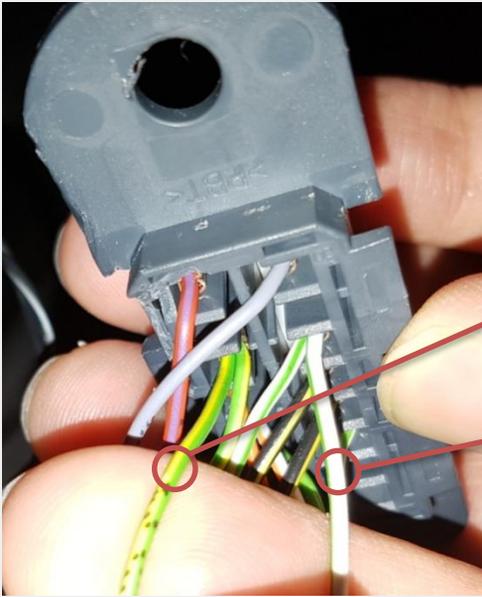
* Short press : Back to OEM

• Installation diagram



• CAN connection (GEAR, PAS)

※ Find OBD cable under the driver's seat



CAN Low : this cable is connected to CAN1-L (#4 pin) of the supplied power cable

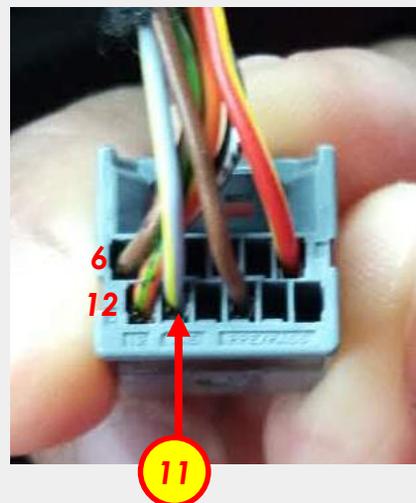
CAN High : this cable is connected to CAN1-H (#3 pin) of the supplied power cable

※ The color of wires may vary

• ADC connection to use OEM button

※ Find the cable behind the monitor

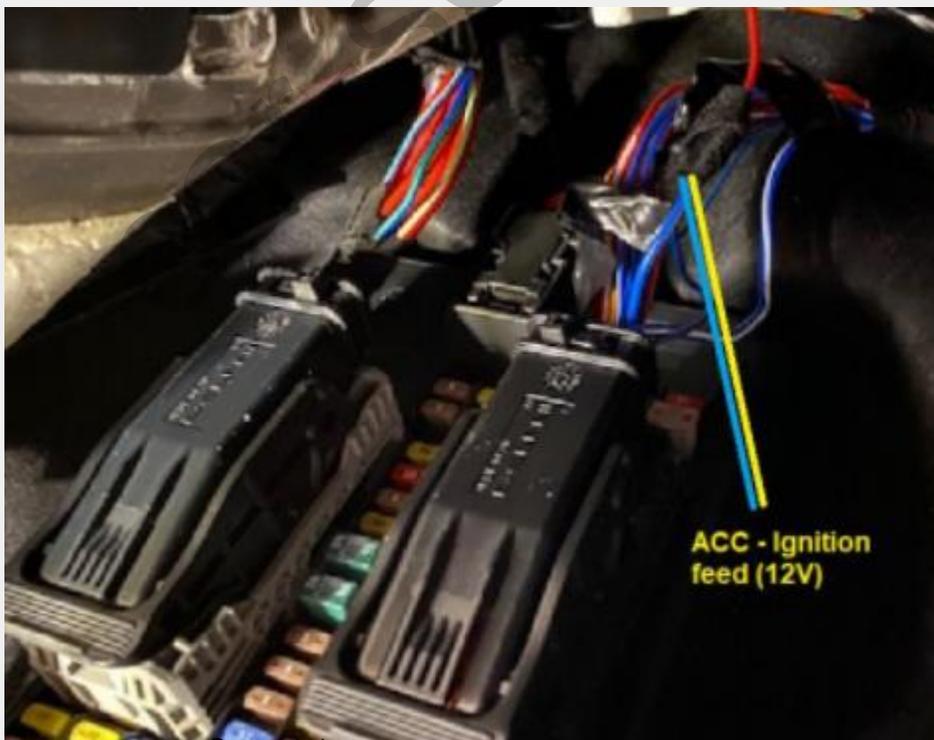
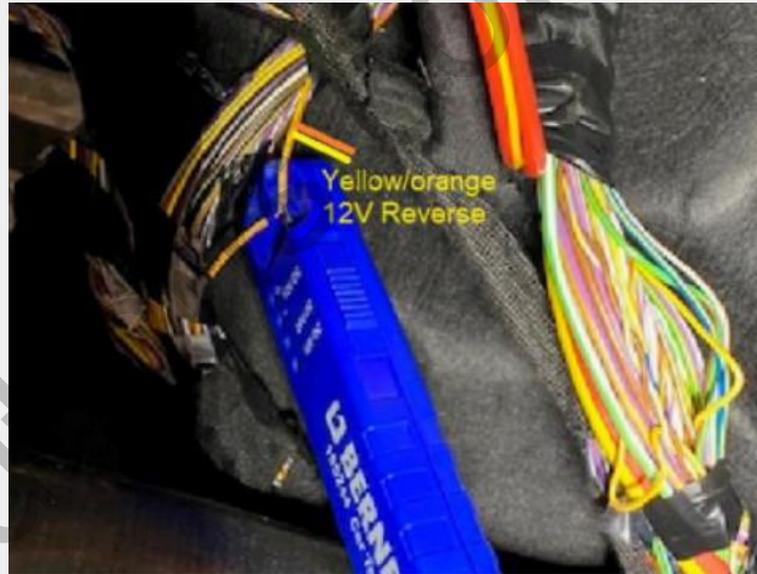
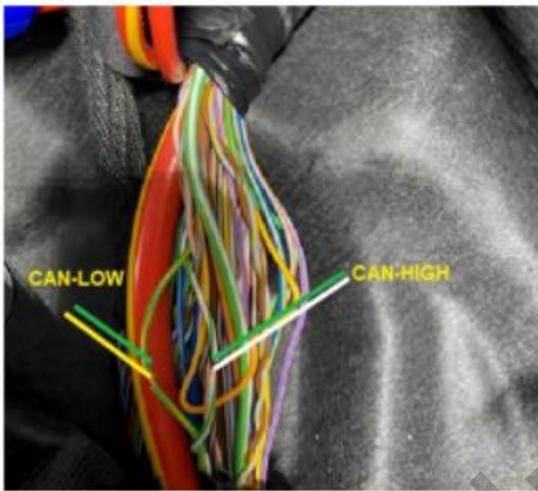
ADC (#11 pin) : this cable is connected to BUTTON1 (#7 pin) of the supplied power cable



• CAN connection (GEAR, PAS)

※ CAN wires are not located at OBD parts.

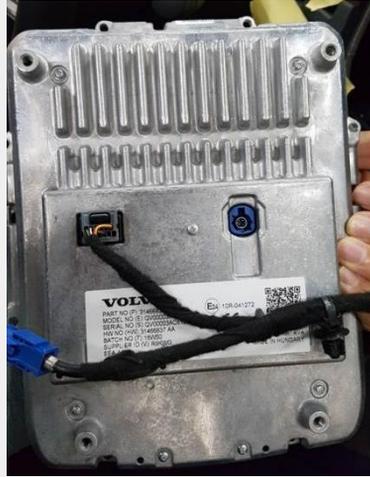
Car location	Wire color	Signal
Front / Left BMI module	Yellow/orange	12V reverse
Front / Left BMI module	Green/yellow	CAN-LOW
Front / Left BMI module	White/Green	CAN-HIGH
Front / right Fuse box	Blue/yellow	ACC Ignition feed (12V)



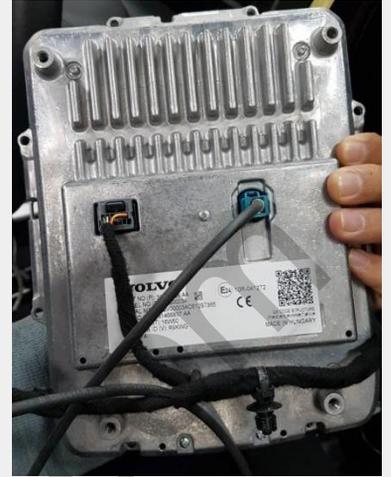
• LCD cable connection



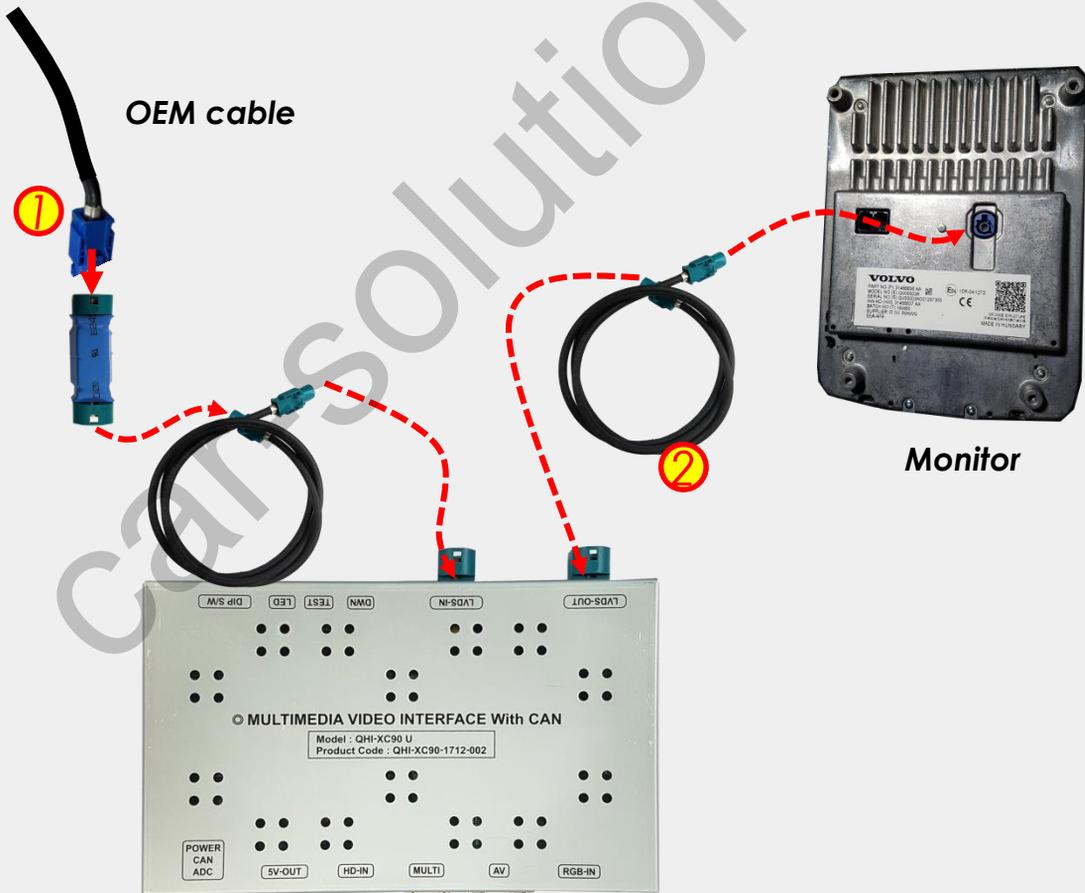
Find OEM blue cable on the back side of the monitor



Remove the OEM blue cable



Connect the supplied LCD cable to the same place.



1. Connect Blue OEM cable to LCD extension connector and the supplied LCD cable is connected between LCD extension connector and LVDS-IN of the interface

2. Also, the supplied LCD cable is connected between the monitor and LVDS-out of the interface

• Cautions Before Installation

1. Ignition key should be taken off before starting installation, interface power connection must be the last step in installation.
2. Power cable should be separated when connecting interface.
3. Should be no any electronic devices or magnetic pole around installation place.
4. All steps of installation should be done by well-trained specialist.
5. Dismantling without manufacturer's permission can not be guaranteed, (No permission to break attached label on the board.)
6. Kindly check all parts are in the box, when receiving the product, if anything missing, inform to the supplier or manufacturer.
7. According to our sales policy, any problems caused by user's mistake, careless can not be guaranteed.

• Trouble shooting

Q. I cannot change mode

A. Check connection of Ground cable and IR Cable. Check LED lamp is on, if not check connection of 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 dark or unsuitable color)

A. Press ► button on the remote control for 2 seconds and check how it goes, if it does not work, inform to manufacturer.

Q. I cannot watch the rear camera on the screen

A. Set the DIP switch #7 as state "ON".

Q. Set mode not appear

A. Check DIP Switch.

Q. OEM image is not displayed.

A. Check interface's LCD In/Out cable connection. If the status keeps on, inform to manufacturer.

Q. Screen only displays white color.

A. Check LCD out cable is connected well, if this status keeps, inform to manufacturer.

Q. If no image is shown on screen after connecting CAN wire with Park gear.

A. Go on the "FACTORY MODE", check "UTIL-Rear Select". If "LAMP", change the setting as "CAN" with the remote control. (* when connecting Rear-C wire of LAMP power cable to Backup lights, Setting should be like this / CAN : if controlling rear camera with CAN wire)