

Car Video Interface for Volvo with 7" Monitor

User & Installation Manual

Warning / Caution



Warning

- When installing the main unit, do not remove or alter existing vehicle fasteners, including nuts, bolts, screw, clips, and fittings. Never detach, move or alter existing vehicle wiring, including electrical grounds and straps. Alteration of existing vehicle components may make vehicle unsafe to operate. Should be no any electronic devices or magnetic pole around installation place.
- Air bags are vital part of a safety system. Never install main unit in a way which will alter air bag wiring or interfere with air bag deployment. Air bags must function properly in the event of an accident.
- Before installing, check the location of pipe, tank, electrical cables and others.
- Read and follow the instruction manual.
- Wiring location must not interfere driving, get in or out from car.
- Use electrical tape to insulate the ends of all wires, even if they are not used. Proper insulation prevents arcs, shocks and fires.
- When installation is complete, test all vehicle electrical systems to ensure they operate correctly, including lights, horn, brake lights, and emergency flashers.
- According to our sales policy, any problems caused by user's mistake, careless can not be guaranteed.



Caution

- All steps of installation should be done by well-trained specialist.
- During installation ignition key should be taken off and after all installation finish connect power cable with interface for the last step.
- Do not install the main unit in places where it may be exposed to dew condensation (around the air conditioning hose, etc), or in locations where it may come in contact with water, high levels of moisture, dust or oily smoke
- Install wiring in a manner in which cables will not come in contact with metal parts. The wiring may be damaged by contact with metal parts, resulting in fire and shocks. Avoid all contact with hot surfaces when wiring the main unit. High temperatures may damage wiring, causing shorts, arcing and fires.
- Kindly check all parts are in the box, when receiving the product, if anything missing, inform to the supplier or manufacturer.

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1. Specifications

1.1 Main Specifications

1. Car Compatibility
Volvo S60, S80, V40, XC60(2014)
2. Components
Interface* 1EA
3. MULTIMEDIA INTERFACE input specification
 - 3 * A/V input (video external input)
 - 1 * CVBS(Rear Camera) input
 - 2 * Analog RGB input (Navigation system, HDMI)
 - 1 * LCD input (Car system input)
4. MULTIMEDIA INTERFACE output specification
 - 1 * LCD output
5. Power specification
 - Input power : 8VDC ~ 18VDC
 - Consumed power : 5WATT

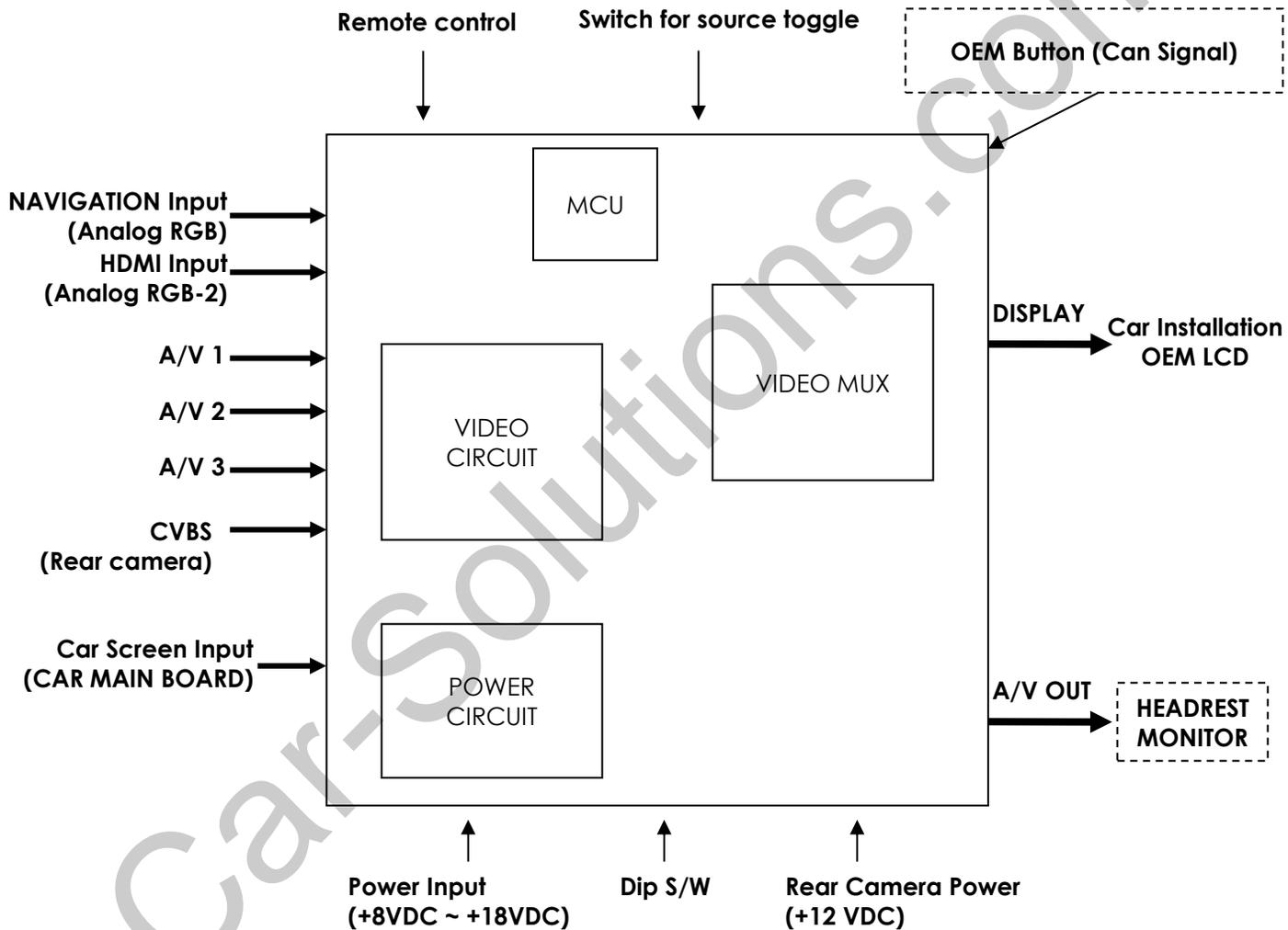
1. Specifications

1.2 Functions

1. Dynamic PAS(Parking assistance system)+3D PDC(Parking distance control)
 - moving parking line according movement of steering wheel
 - Front / Rear car distance sensor display in external mode
2. Support PIP display – showing sources at the same time (Picture in Picture)

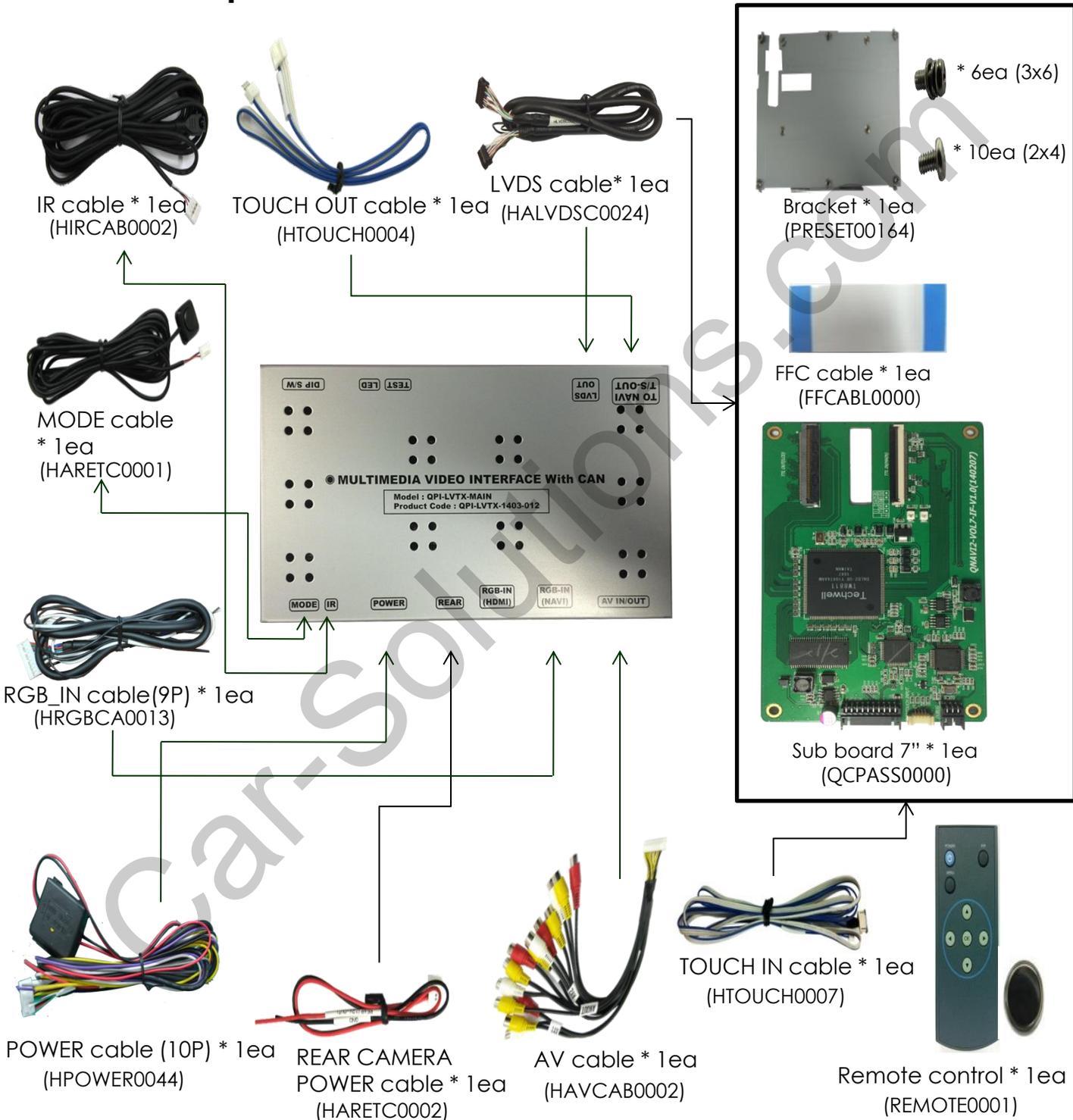
1. Specifications

1.3 System Diagram



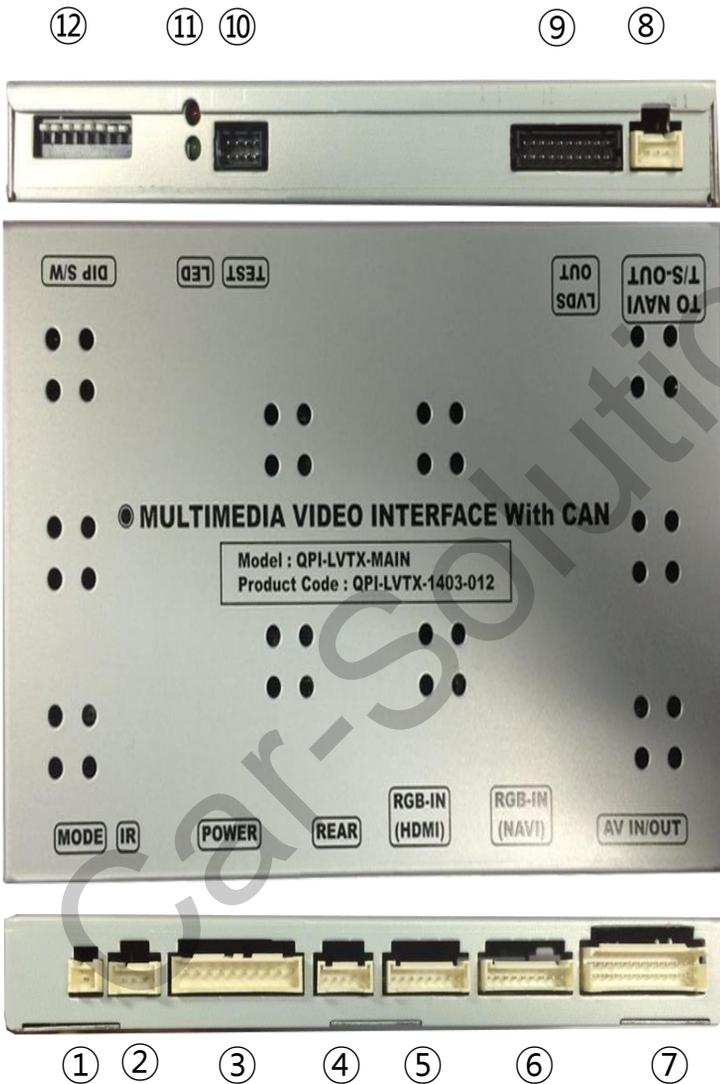
1. Specifications

1.4 Components



1. Specifications

1.5 Exterior



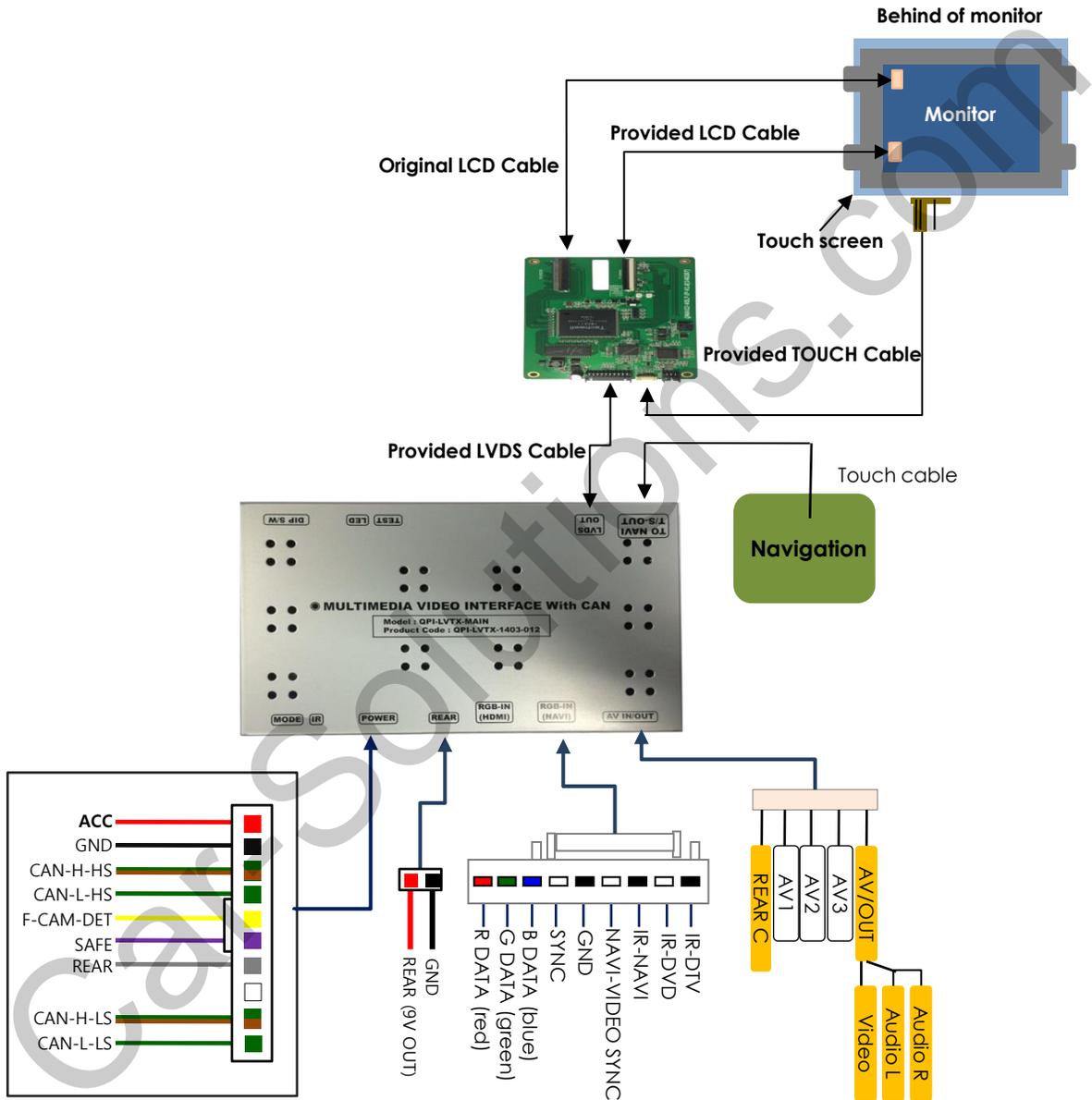
Dimension

Width 150.4mm
Length 99.4mm
Height 2.3.2mm

- ① MODE
- ② IR
- ③ POWER
- ④ REAR CAMERA
- ⑤ RGB-IN(HDMI)
- ⑥ RGB-IN(NAVI)
- ⑦ AV IN/OUT
- ⑧ TO NAVI T/S-OUT
- ⑨ LVDS OUT
- ⑩ TEST
- ⑪ LED
- ⑫ DIP S/W

2. Installation

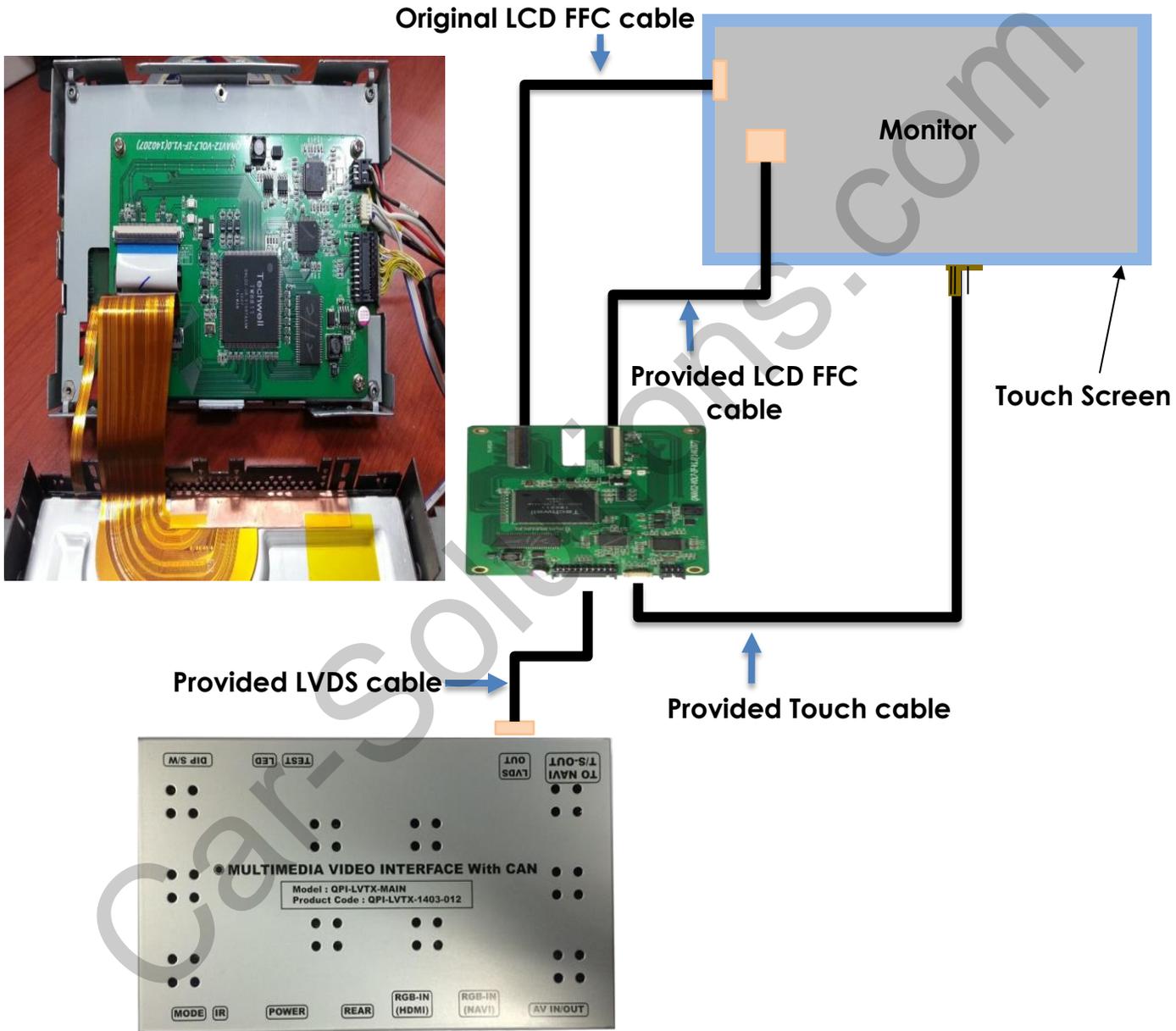
2.1 Installation Diagram



※ Please connect ACC cable to B+ cable

2. Installation

2.2 Installation



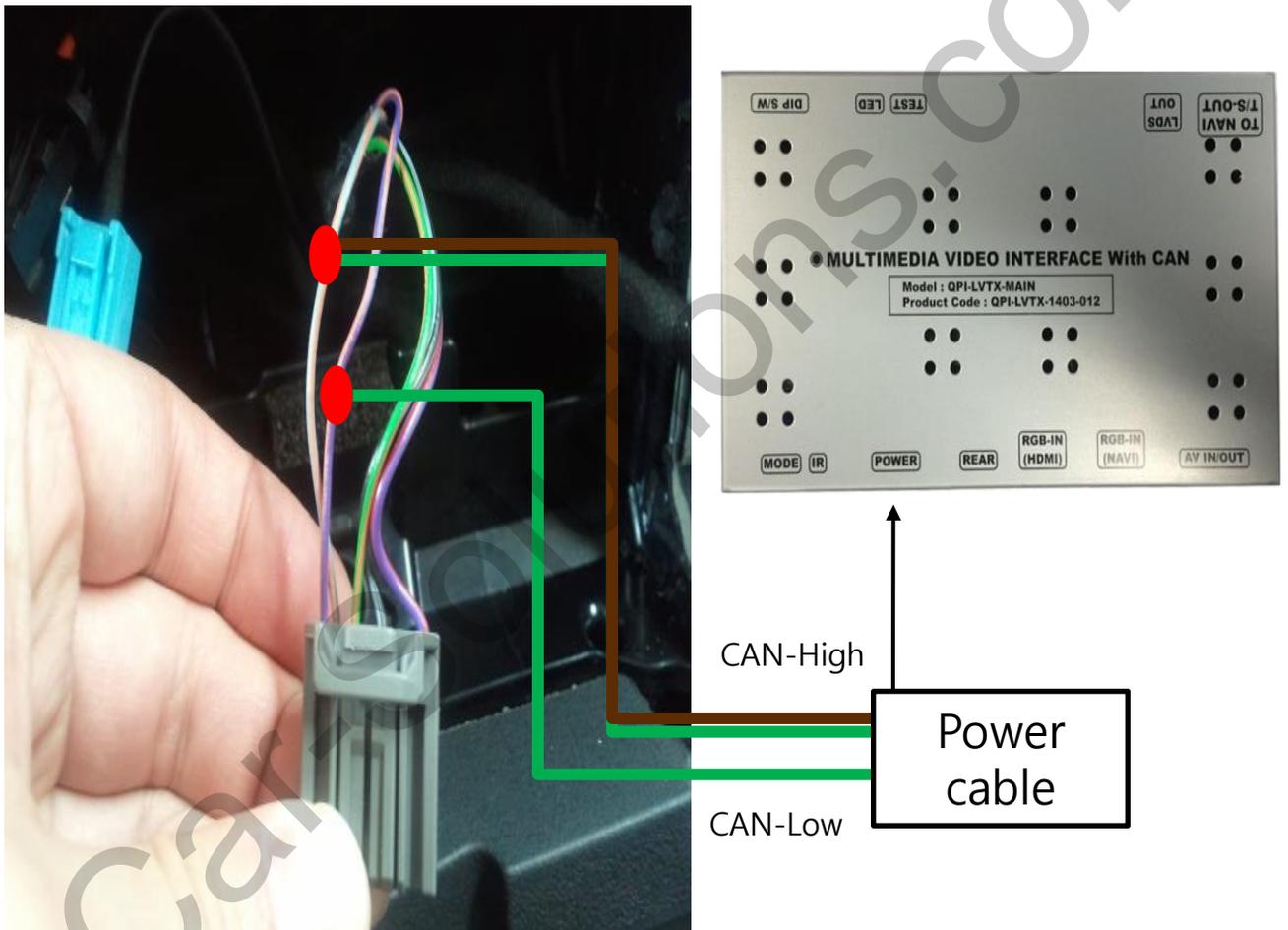
✳ Touch : Optional

2. Installation

2.3 CAN wire Installation

Connecting CAN cable respectively

The LCD cable in the back of monitor connect with offered powercable



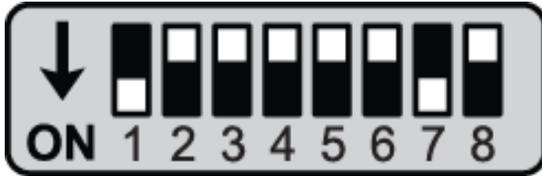
Connect CAN-H-HS cable (green+brown) enclosed in our package with the original CAN-H cable (grey+orange).

And connect CAN-L-HS cable (green) enclosed in our package with the original CAN-L cable (violet+orange).

3. Settings

3.1 DIP Switch

- ※ Example DIP S/W usage
 - Use input mode : A/V2, A/V3
 - Use original navigation
 - External rear camera



※ ON : DOWN / OFF : UP
Default: #8 OFF

- ▷ DIP S/W : 1 → ON (hide INPUT MODE)
- ▷ DIP S/W : 2,3 → OFF (A/V1,2 display)
- ▷ DIP S/W : 4 → OFF (A/V3 display)
- ▷ DIP S/W : 5 → ON/OFF
- ▷ DIP S/W : 6 → ON/OFF
- ▷ DIP S/W : 7 → ON (display external rear cam)
- ▷ DIP S/W : 8 → OFF

PIN	Function	Dip S/W Selection		
1	Displaying RGB input	ON : RGB mode skip OFF : RGB mode display		
2	Displaying A/V 1	ON : A/V 1 mode skip OFF : A/V1 mode display		
3	Displaying A/V 2	ON : A/V 2 mode skip OFF : A/V2 mode display		
4	Displaying A/V 3	ON : A/V 3 mode skip OFF : A/V3 mode display		
5	Car Model	Model	#5	#6
		S60	OFF	OFF
		V40	ON	OFF
		S80	OFF	ON
		XC60(2014)	OFF	OFF
7	Setup of rear camera use	ON : CVBS4 OFF : MAIN		
8	no use			

※ 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.

3. Settings

3.2 Remote Control



<i>Key</i>	<i>Function</i>
POWER	Unavailable
PIP	A/V 1~2 Mode : Remote control UI Display HDMI, A/V 3 Mode : Mode switching UI Display
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.)

3. Settings

3.3.1 Rear parking guidelines

< Rear camera full screen >



< PIP screen >

(V40 : Not applicable)



☞ Change the size of image : Press **CAM button** in Rear mode.



☞ Mode switches :

- NAV button** - Long Press (Switch to external mode)
- Short Press (Switch to OEM mode)

3. Settings

3.3.2 PIP(Picture in Picture)



< Before Approaching objects >



< After Approaching objects >

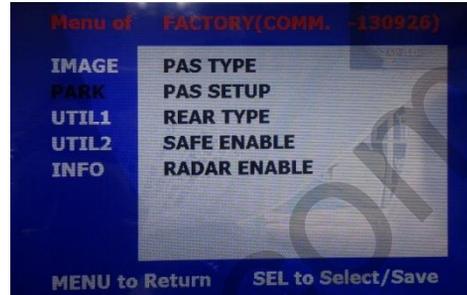
- PIP image will be shown as above.

(Car without Front sensor : Not applicable)

3. Settings

3.3.3 FACTORY MODE-IMAGE, PARK

FACTORY mode – Press ◀ button 2 seconds long on the remote control.



□ IMAGE

Adjust navigation position and size

H-POSITION : Move display horizontally

V-POSITION : Move display vertically

□ PARK

PAS TYPE : Selecting Type of parking guide line

- NOT USED : Not use Parking guide line

- PAS ON : Selecting Dynamic Parking guide line

- PAS OFF : Selecting fixed Parking guide line

PAS SETUP : Adjusting the position of the parking guide line

REAR TYPE : Choose rear camera recognition

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

*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.)

SAFE ENABLE : If your car is connected with CAN cable and it is in "ON" state, you can NOT watch DVD or A/V except original image or navigation while driving. At that time the screen get back to the main (default : OFF)

RADAR ENABLE : When set the gear to "R", Display PDC

3. Settings

3.3.4 FACTORY MODE-UTIL1

FACTORY mode – Press ◀ button 2 seconds long on the remote control.

▪ Setup for navigation

▪ Setup for car model



UTIL1 – NAVI MODEL

Definition of the navigation resolution

DEAFULT
NAV-506TP
MYVI
WP9200
HDMI
GI-8000N 3D
GI-5000A
I-ONE
KD-900
PAPAGO
LS-901

*** Go into FACTORY/ IMAGE (as shown right) and adjust the position and the size of the navigation after setting the definition of the navigation**

UTIL1 - CAR MODEL

Selecting model of the car

Volvo

3. Settings

3.3.4 FACTORY MODE-UTIL1

FACTORY mode – Press ◀ button 2 seconds long on the remote control.



UTIL1 – AVOUT SELECT

Selecting background sound
After
returning navigation or original
mode

DEFAULT : Selecting AV sound
just before changing
navigation or original mode
from the AV mode

AV 1~3 : Sound of the selected
AV source 1~3

UTIL1 – HDMI SKIP

Selecting whether to use
HDMI function or not

ON(Not use) / OFF(use)



UTIL1 - FACTORY RESET

FACTORY MODE RESET

3. Settings

3.3.5 FACTORY MODE-UTIL2

FACTORY mode – Press ◀ button 2 seconds long on the remote control.



UTIL2 - I_DRV REMOTE

Choose DTV and DVD model to be control I_DRV function

LI-1DISC

NEC-6DISC

USER(when using IR MEMORY)

•Select DVD model: Setting on AV1 Mode

•Select DTV model : Setting on A/V2 mode



UTIL2 – IR MEMORY

To register DVD, DTV remote control, the remote control value must be registered and can be control with Jog shuttle DVD(A/V1), DTV(A/V2)

※ To use this function, in UTIL2-I_DRV REMOTE select USER mode

UTIL2 - I_DRV CONTROL

Selecting whether to use I_DRV function or not

ON / OFF

A/V1 : Control DVD Remote control UI

A/V2 : Control DTV Remote control UI



UTIL2 – CALIBRATE

Touch Calibration

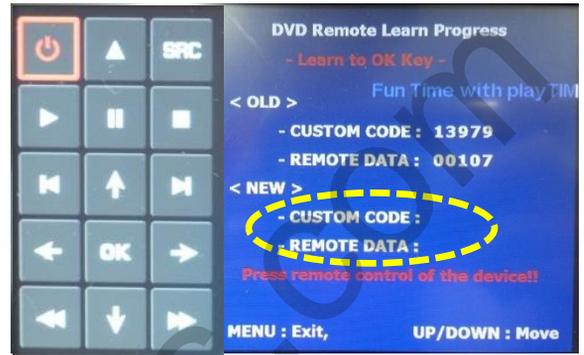
YES / NO

3. Settings

3.3.5 FACTORY MODE-UTIL2

FACTORY mode – Press ◀ button 2 seconds long on the remote control.

□ UTIL2 – IR MEMORY



- ① First of all, press ◀ button on remote controller 2 seconds long or press UP→DOWN→UP→MENU button in order to access Factory mode. Choose IR MEMORY on UTIL2.

In IR MEMORY, you can choose AV source of DTV and DVD you want to use.

- ② Picture above shows DVD remote control button value input, select menu you want to save. (To register DVD remote control button value, select IR MEMORY – DTV and follow below instructions.

Example)

- a. After select OK button on OSD menu, press intended I-Drive button
- b. Indicated part above will flicker, and press POWER on DVD remote control.
(continue to next page)

What is IR-MEMORY Mode?

Is to allow Jog shuttle and touch screen to control other DVD or DTV (besides the existing,; for example : SANYO, NECVOX) by register remote control value.

3. Settings

3.3.5 FACTORY MODE-UTIL2

FACTORY mode – Press ◀ button 2 seconds long on the remote control.

□ UTIL2 – IR MEMORY



Instruction> continued...

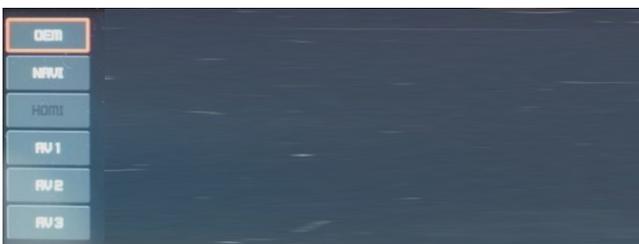
c. The values that you registered will appear as green text in the marked area on pressing the button. And the values will be saved automatically.

d. Register remain buttons' value in OSD menu like the above-mentioned.

- ③ After register, select "SRC" button in OSD menu. Then you can see confirmation window as shown above. At the moment, (If data is saved, DVD TYPE and DTV TYPE will be changed to "USER" automatically.)

If you see "SUCCESS" on screen, the data is saved clearly and you can control DVD via touch screen. BUT, you MUST change the option in FACTORY-UTIL2-I_DRV REMOTE to "USER".

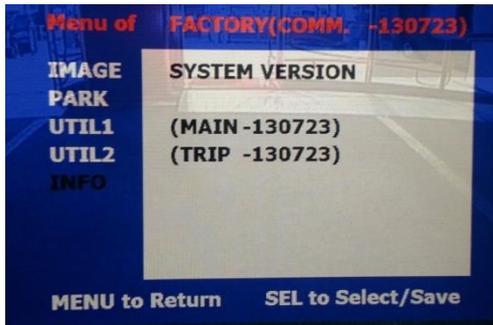
- ※ When touch the screen or Select PIP button in remote controller, you can control DVD, DTV using remote control UI via touch screen or Jog shuttle
- ※ DVD(A/V1), DTV(A/V2) mode, Can see remote control UI
- HDMI, A/V3 mode, Can see mode switching UI
- If you want to see mode switching UI in DVD, DTV mode, Select "SRC" button



3. Settings

3.3.6 FACTORY MODE-INFO

FACTORY mode – Press ◀ button 2 seconds long on the remote control.



INFO

Check main version and Trip version

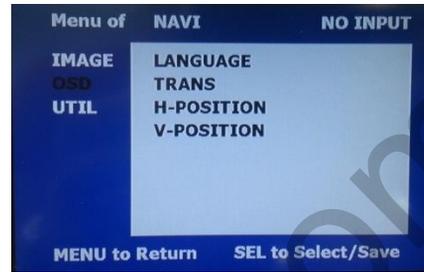
3. Settings

3.3.7 OSD (On Screen Display) / Analog RGB Mode



□ IMAGE

- * BRIGHTNESS
- * CONTRAST
- * SHARPNESS



□ OSD

- * LANGUAGE : Set OSD language (only support English and Chinese)
- * TRANS : Adjust OSD transparency
- * H-POSITION : Move OSD horizontally
- * V-POSITION : Move OSD vertically



□ UTIL

- * FACTORY RESET
: Factory reset only for OSD function
(unable reset video position)

3. Settings

3.3.8 OSD (On Screen Display) / Video Mode

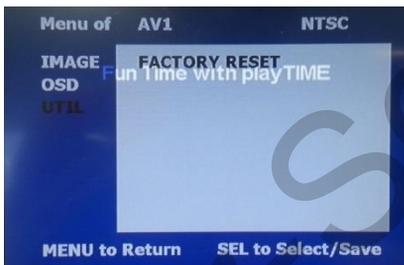


□ IMAGE

- * BRIGHTNESS
- * CONTRAST
- * SATURATION
- * HUE
- * SHARPNESS

□ OSD

- * LANGUAGE : Set OSD language (only support English and Chinese)
- * TRANS : Adjust OSD transparency
- * H_POSITION : Move OSD horizontally
- * V_POSITION : Move OSD vertically



□ UTIL

- * FACTORY RESET
: Factory reset only for OSD function (unable reset video position)

4. 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. Try to select "INITIAL" in OSD menu, 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. Show PIP function via handle button, and original screen appear half only.

- A. This is not because of faulty interface, please check original monitor split function settings.

Q. After connect CAN cable, set gear "R", video doesn't appear.

- A. Go to "FACTORY MODE" and check "UTIL-Rear Select". Change "LAMP" settings to "CAN" with remote control.
※ LAMP : In case of connecting "Rear-C" wire of Power Cable to Rear Lamp in vehicle.
It may not work on a camera with 12V

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