

Model : QVL-A6LE-V3 / Product code : AD-1012-001

Video Interface for AUDI A4, A5, A6, A8, ALLROAD, Q5, Q7

With MMI 2G head units

With external touch screen panel support

Installation Manual

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1.1 Main Specifications

1. Input Spec. (*MULTI VIDEO INTERFACE*)

- 1 x **Analog RGBCs** (*for navigation system*)
- 1 x **REAR-C Input** (*for external rear camera source, supports NTSTC & PAL auto detection*)
- 3 x **A/V Input** (*for external video source - DVD, TV, DVB-T; supports NTSC & PAL auto detection*)
- 1 x **LCD-OUT** (*input for video from MMI 2G unit*)
- 1 x **NAVI Touch** (*for external touch screen panel*)

2. Output Spec.

- 2 X **A/VOUT** (*video/audio output for installed headrest monitor*)
- 1 x **Touch OUT** (*connection of external touch screen panel to Navi connected via RGBCs input*)
- 1 X **LCD-IN** (*video output for connection to OEM display*)
- 1 X **R-CAM** (*power output for external rear camera connected via REAR-C input*)
- 1 X **IR OUT** (*IR-Data wire for DVD, TV, DVB-T unit control via touch panel – see page 17-19*)

3. Power Spec.

- Input Power : 10 V DC ~ 16 V DC
- Consumption Power : 6 W (max)

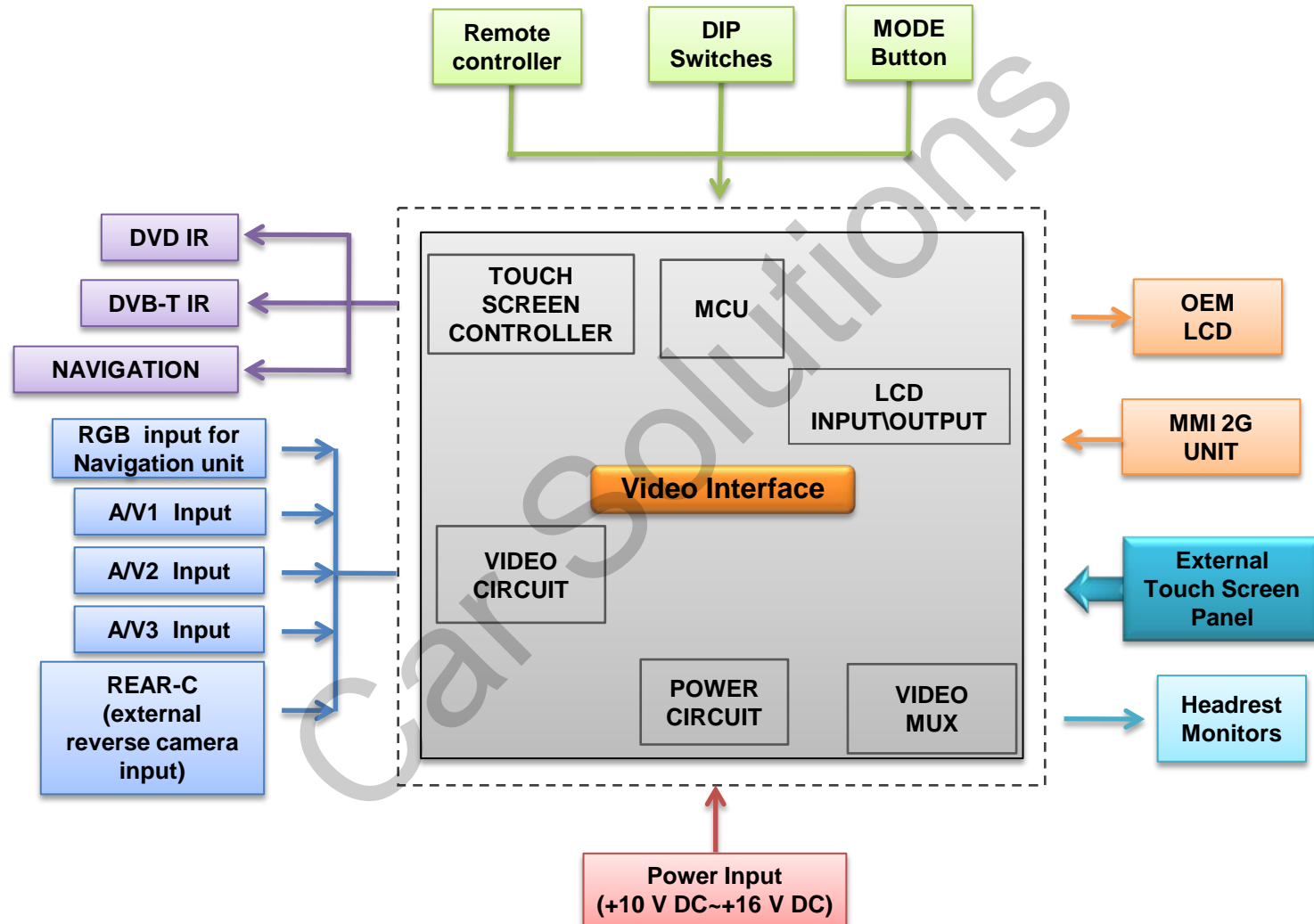
4. Mode change

- Video input disable : possible to skip each input source by adjusting DIP switches (*page 9*)
- Control by using the remote controller (*page 10*)
- Possible to switch between modes by remote mode switch button
- Possible to change modes and control DVD, CMMB via external touch screen panel (*page 12*)
- Able to change modes via using the original buttons **NAVI** at MMI 2G panel (*page 23*)

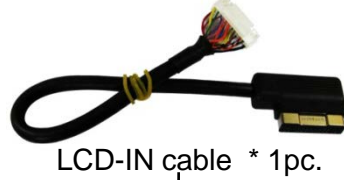
1.2 Features

- DVD, DVB-T and Navigation unit control via external touch panel
- DVD, DVB-T, navigation control via OEM MMI buttons
- **Installation near OEM display**
- Plug & Play (the LVDS cable offered)
- Possibility to adjust position of AV1-3, RGB image
- Screen display adjustment (user friendly interface)
- Remote controller offered

1.3 System Diagram



1.4 Components



LCD-IN cable * 1pc.



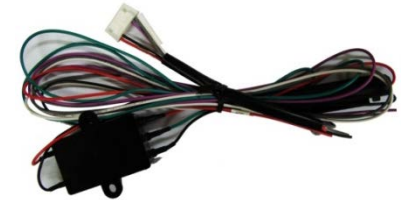
TOUCH out cable * 1pc.



Navi touch cable * 1pc.



Remote Controller * 1pc.



Power cable (8P) * 1pc.



IR cable * 1pc.



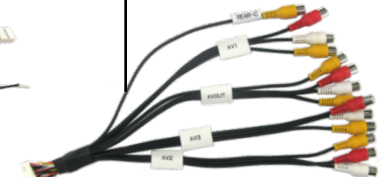
Mode button * 1pc.



IR OUT cable * 1pc.



RGB cable * 1pc.



A/V cable * 1pc.

1.5 Exterior



Dimensions

Horizontal length 130mm
Vertical length 105mm
Height 20mm

- ① LCD-IN – output for OEM display
- ② LCD-OUT – input for MMI 2G unit
- ③ TOUCH OUT – input for external touch screen panel
- ④ NAVI TOUCH – output for navigation
- ⑤ LED – status indicating LEDs
- ⑥ DIP S/W – Dip switches
- ⑦ REMOTE – input for IR receiver
- ⑧ MODE BUTTON – for mode change button
- ⑨ IR OUT – IR output
- ⑩ RGB (IN) – input for navigation unit
- ⑪ AV (IN/OUT) – AV inputs / outputs
- ⑫ POWER\CAN\MODE

1.6 Power Cable



2.1 DIP switch

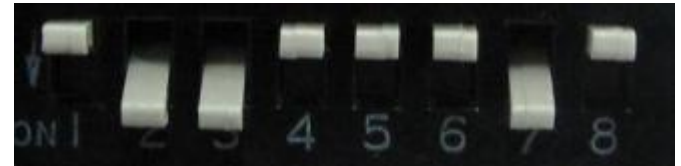
DIP #	Function	DIP S/W selection
1	RGB Input	ON : RGB Input is OFF OFF : RGB Input is ON
2	A/V1 Input	ON : A/V1 Input is OFF OFF : A/V1 Input is ON
3	A/V2 Input	ON : A/V2 Input is OFF OFF : A/V2 Input is ON
4	A/V3 Input	ON : A/V3 Input is OFF OFF : A/V3 Input is ON
5	NOT USED	
6	NOT USED	
7	Rear Mode	ON : External Rear Camera OFF : OEM Rear Camera
8	OEM Video Input from MMI 2G unit	ON : OEM input is OFF OFF : OEM input is ON

DIP ✘ ON : DOWN, OFF : UP

[AUDI A6LE 2008]

- Input modes: Navigation (RGB), A/V3(DVD)
- Rear Camera: connected to REAR-C input

- ▷ DIP S/W : 1 → OFF (RGB input is ON)
- ▷ DIP S/W : 2 → ON (AV1 input is OFF)
- ▷ DIP S/W : 3 → ON (AV2 input is OFF)
- ▷ DIP S/W : 4 → OFF (AV3 input is ON)
- ▷ DIP S/W : 5 → OFF (**NOT USED**)
- ▷ DIP S/W : 6 → OFF (**NOT USED**)
- ▷ DIP S/W : 7 → ON (enable REAR-C)
- ▷ DIP S/W : 8 → OFF (OEM input is ON)

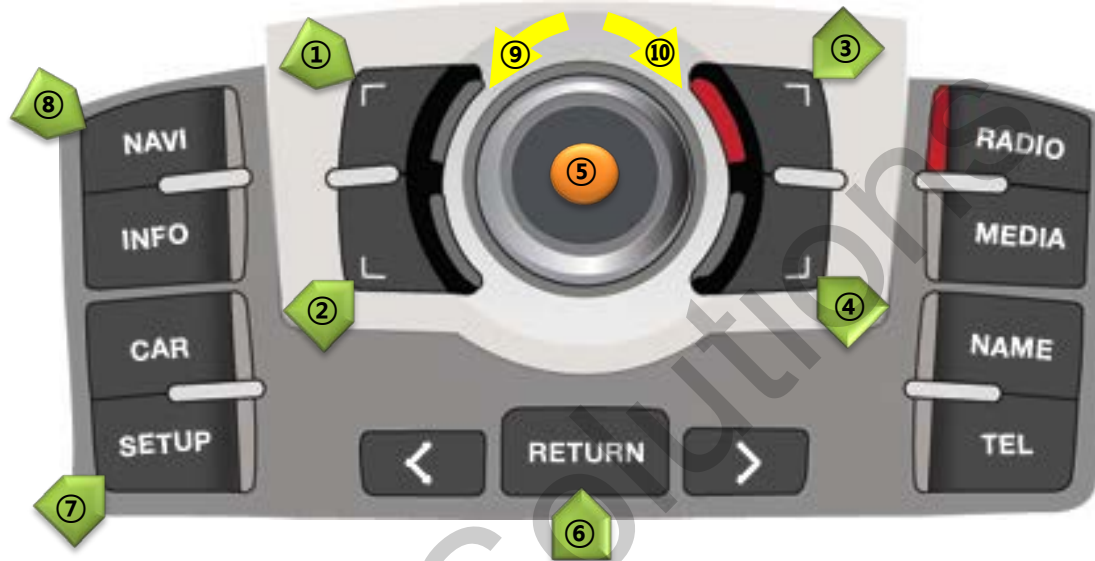


2.2 Remote Controller

Buttons	Function
POWER & PIP	NOT USED
MENU	OSD Menu
OK	Selection or Mode change
▲	Move UP
▼	Move DOWN
◀	Move LEFT <i>(or press 2 sec. – Factory Mode)</i>
▶	Move RIGHT <i>(or press 2 sec. - Factory Reset)</i>



2.3 Original Buttons



NAVIGATION implementation **Temporarily NOT USED**

- ① Move up
- ② Move down
- ③ Magnification
- ④ Reduction
- ⑤ Confirm or press 2 sec.- menu activation
- ⑥ Return - press 2 sec.
- ⑦ Setup for destination or press long 2sec. - driving in night mode
- ⑧ Mode change
- ⑨ Move left
- ⑩ Move right

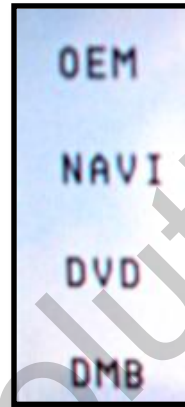
DVD, CMMB implementation

- ⑤ Confirm
 - ⑨ Move counterclockwise
 - ⑩ Move clockwise
- ※ If you press any of these three buttons, DVD/CMMB OSD menu will appear on the screen.

2.4 OSD Buttons Activation

OSD buttons for DVD

For DVD control via OSD menu installer shall connect DVD system to AV1 input and join "DVD IR" cable from video interface cables with DVD IR receiver DATA cable.



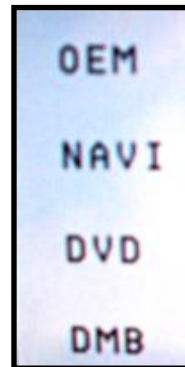
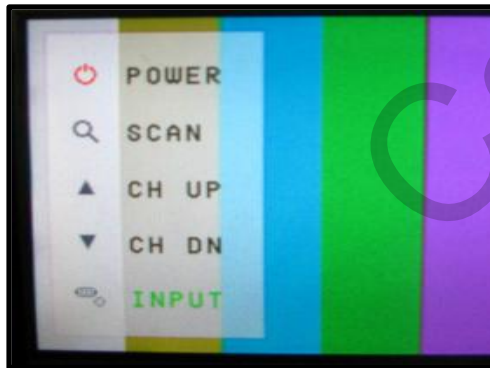
First of all, if you touch the screen in mode "AV1", you can see the menu as shown left. And then if you do NOT touch anything on the screen for 5 seconds or longer; or if you touch the screen in the place beyond menu, the menu will disappear.

At that time, if you choose "INPUT", you can get out of the menu and see the mode change menu.(left picture)

Here is a picture of the mode change menu. If you select the channel which you want, you will switch to selected video source. (right picture)

OSD buttons for - DMB, NAVI

DVD, navigation menu is available in English or Chinese. You can change menu language by pushing "MENU" button on remote controller.



As shown above, if you touch the screen in mode "AV2", you can see the menu as shown left. And then if you do NOT touch anything on the screen for 5 seconds or longer; or if you touch the screen in the place beyond menu, the menu will disappear.(left picture)

Here is a picture of the mode change menu. If you select the channel which you want, you will switch to selected video source. (right picture)

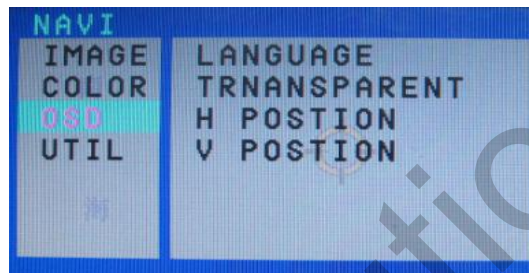
2.5 OSD-menu (On Screen Display)

OSD menu: Press "MENU" button on the remote controller.

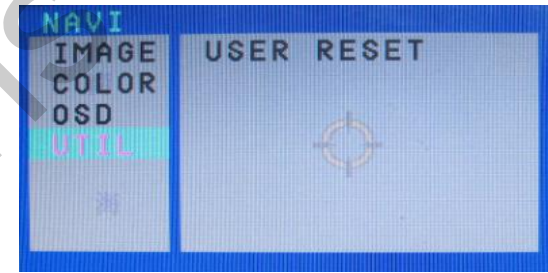
Analog RGB mode



Analog RGB mode



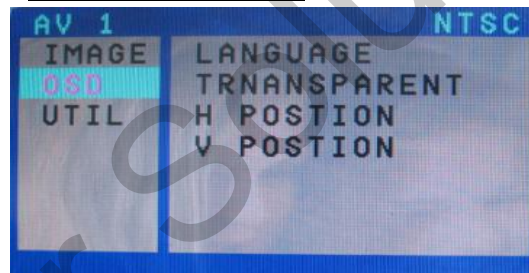
Analog RGB mode



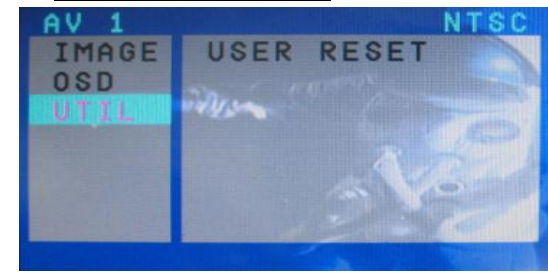
Video AV1-3 mode



Video AV1-3 mode



Video AV1-3 mode



IMAGE

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

OSD

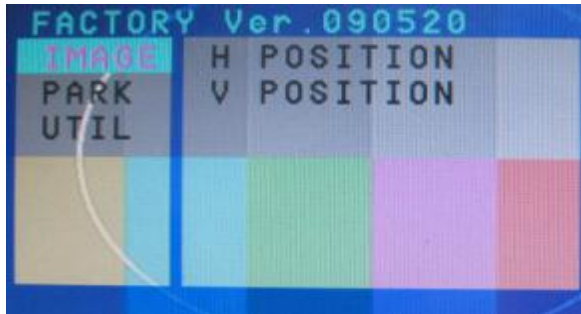
- LANGUAGE : To change DVD, CMMB OSD menu language (select 1 among English or Chinese)
- TRANS: OSD background transparency adjustment control of the
- H_POSITION : Horizontal movement of the OSD window
- V_POSITION : Vertical movement of the OSD window

UTIL

- USER RESET: To restore navigation, DVD screen factory settings
(DOES NOT restore images position, only functions inside OSD menu)

2.6 Factory Mode

Factory mode: Press ◀ button 2 sec. or ▲ -> ▼ -> ▲ -> MENU buttons of the IR remote controller



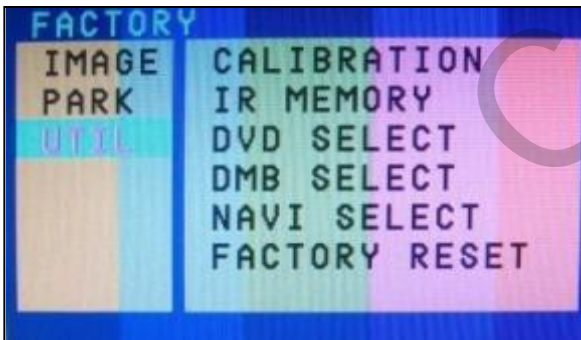
IMAGE

- H-POSITION: horizontal movement of screen (image alignment)
- V-POSITION : vertical movement of the screen (image alignment)



PARK

- PARK ENABLE: Rear view camera parking guidelines activation.
- PARK SETUP : rear view camera parking guideline position adjustment (Refer to page16)



UTIL

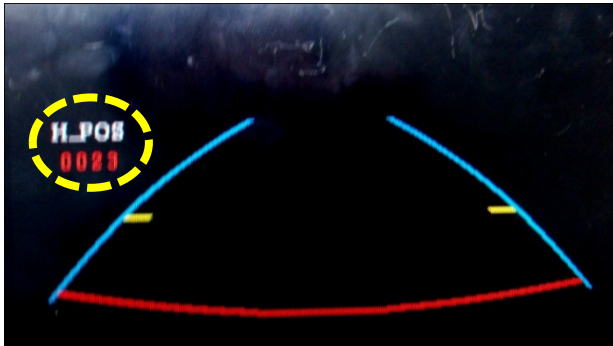
- CALIBRATION External touch screen panel calibration (Refer to page16)
- IR MEMORY : To program value of remote controller buttons (Refer to page17~18)
- DVD TYPE : DVD type setup (Refer to page19)
- DMB TYPE : DMB type setup (Refer to page19)
- NAVI SELECT: Navi type setup
- FACTORY RESET : To restore all factory settings

2.7 Rear View Parking Guideline

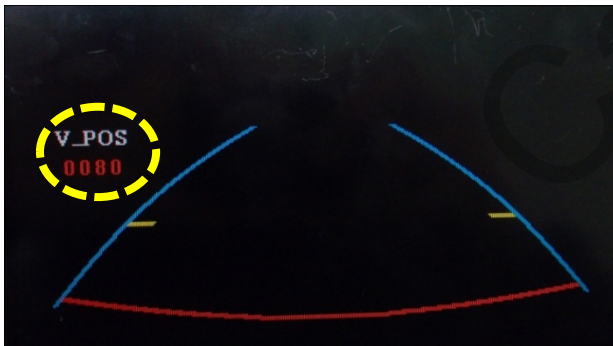
Factory mode: Press ◀ button 2 sec. or ▲ -> ▼ -> ▲ -> MENU buttons of the IR remote controller



① Set "ON" in "PARK ENABLE" line in the PARK section as shown left. (default – ON).

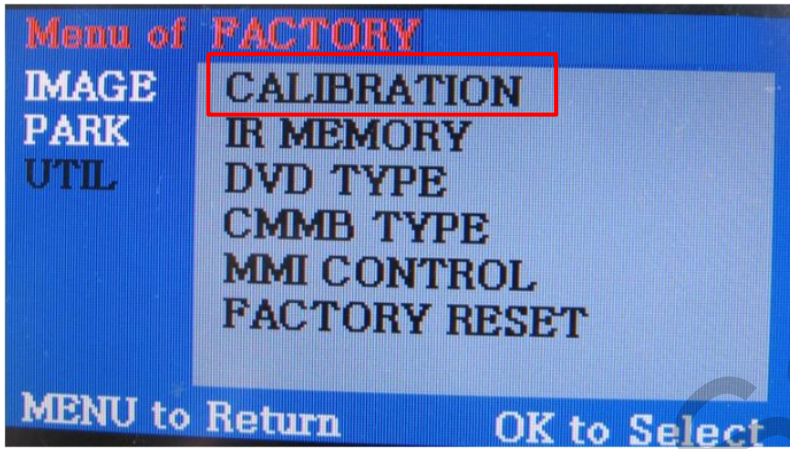


② If you turn on rear gear after setup, parking guidelines will appear on screen as shown left. Now if you push "OK" button, you can see "H-POS" on the left of screen. Then adjust horizontal position of the parking guidelines.



③ After horizontal position adjustment, press "OK" on the remote controller. Then you will see "V-POS" on the left of screen. Adjust vertical position of the guideline.

2.8 External Touch Screen Panel Calibration



- ① First of all, press ◀ button on remote controller for 2 seconds. Then you can enter the FACTORY mode.
- ② Set "YES" after CALIBRATION option is selected as shown above.

- ③ After that "touch calibration" caption appears on screen for **about 2 seconds** as shown above. When it disappears you can calibrate the touch screen. (Just touch on screen.) If calibration was performed, "success" caption will appear. If not, you will see "failure".

2.9.1 Remote Controller Buttons

Programming OSD buttons value using remote controller supplied together with DVD,TV,DVB-T.

If you want to control DVD and DMB models other than SANYO and NECVOX via touch screen (using OSD menu, you can program value of DVD and DMB' s remote controller which you have. Then you can control DVD and DMB via touch screen.



① First of all, press ◀ button on remote controller for 2 seconds. Enter FACTORY mode, then select IR MEMORY in UTIL section. There are two options in IR MEMORY as shown above; DMB and DVD. Select one of these AV sources.

② This is a window where DVD remote controller button values are programmed. Just select a menu you want to save.

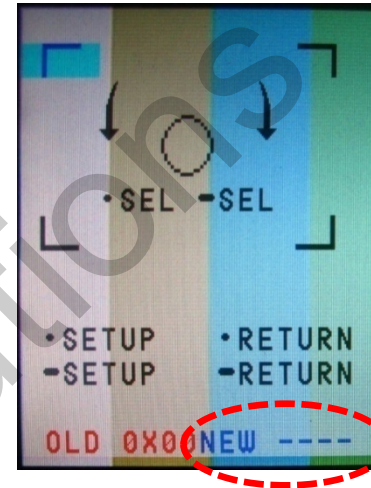
(Select "DMB in options of IR MEMORY" if you want to save values of DMB' s remote controller. And follow the instruction below.)

Programming Instructions>

- Select "POWER" in OSD menu, then press "OK" on remote controller. (as shown above)
- If the marked area flickers as shown above, press "POWER" button on the remote controller of DVD that you want to use.
- Programmed values will appear as green text in the marked area on pressing the button. And the values will be saved automatically.
- Program other buttons value in OSD menu according to the above-mentioned procedure.

2.9.2 Remote Control Buttons

<MMI Buttons setting>



- Short press
- Long press

③ After programming select "INPUT" in OSD menu and press "OK". Then you can see confirmation window as shown above. If you choose "YES", all entered values will be saved.

If you select "NO", the values won't be saved.

If data is saved, DVD TYPE and DMB TYPE will be changed to "USER" automatically.)

If you see "SUCCESS" caption on screen, the data is saved and you can control DVD via touch screen.

HOWEVER, you MUST change the option in DVD(DMB)/UTIL/FACTORY to "USER". (Refer to page19.)

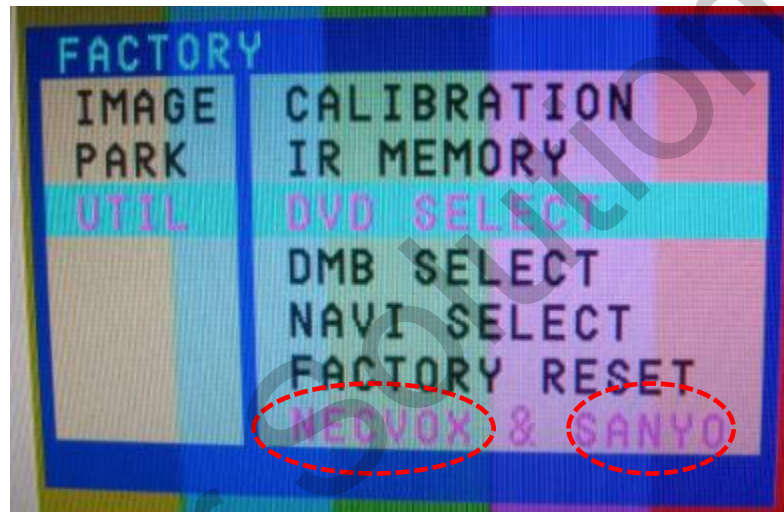
- Select menu you would like to save in MMI Button Settings mode (as shown at the left picture,).

1. If you select OK button of remote controller in OSD menu, the marked area will blink (as shown at the picture).
2. When the left marked point starts blinking, Press "POWER" button of your remote controller.
3. As soon as the "Power" button is pressed, button value will be displayed on the screen, it will be saved automatically.
4. Use the same procedure to save other buttons.

2.10 DVD, DMB Model Selection

Factory Default : DVD TYPE – NECVOX/SANYO

DMB TYPE – DVB-T(CMMB) PIONEER/PANASONIC



UTIL – DVD/DMB TYPE

If DVD/CMMB type that you want to use is not NECVOX or SANYO, you have to register values of the remote controller that you want to use in the "IR MEMORY" section and set the "DVD TYPE"/"CMMB TYPE" to "USER".

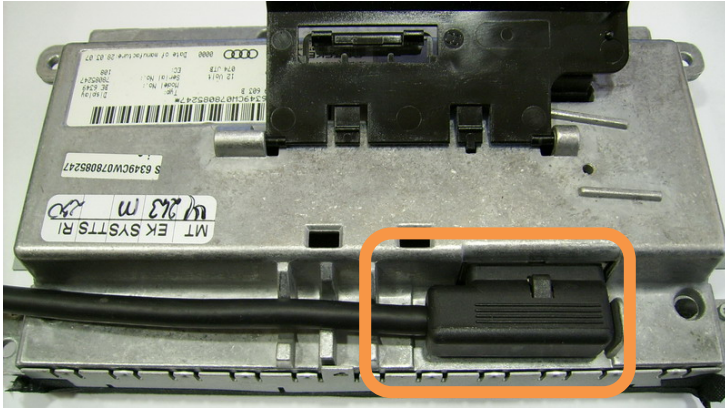
If you do not perform this process after saving the data, you WILL NOT be able to control DVD/CMMB via touch screen.

※ If you enter data in "IR MEMORY" section in FACTORY mode, "DVD TYPE"/ "DMB TYPE" will automatically be saved to "USER"

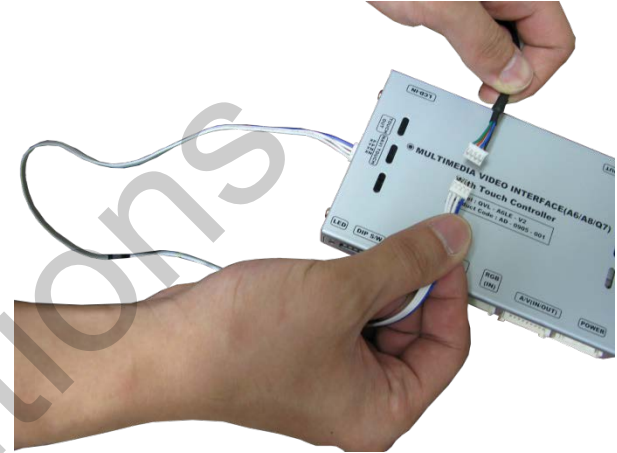
3.2 Cautions on Installation

- Ignition key should be taken off before starting installation, interface power connection must be the last step in installation.
- Power cable should be disconnected during interface installation.
- There should be no electronic devices or magnetic pole around the 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 warranty label on the board.)
- Please, check package content when receiving the product. In case something is missing, inform supplier or manufacturer.
- According to our sales policy any problems caused by user's mistake or carelessness cannot be guaranteed.

3.3 Installation



1. Connect LCD cable (included in the package) to OEM display and video interface.



2. Connect NAVI TOUCH cable to navigation unit or to USB Touch controller **(USB controller not included)**

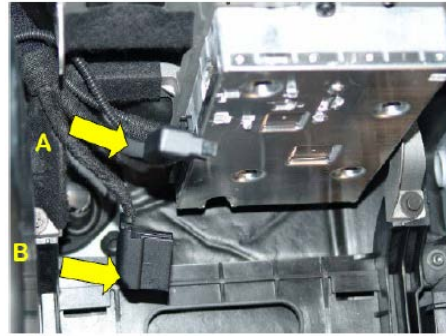
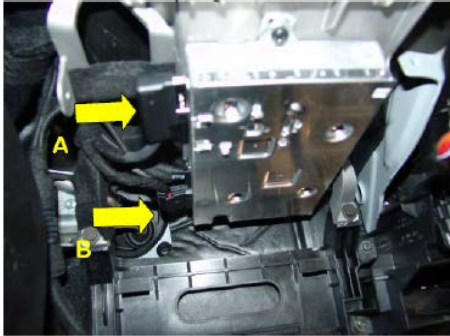


3. Connect Touch Out cable to touch screen panel **(touch screen panel is not included in the package)**

4. You will find more detailed touch screen panel installation guide on the product page of any touch screen panel at www.car-solutions.com

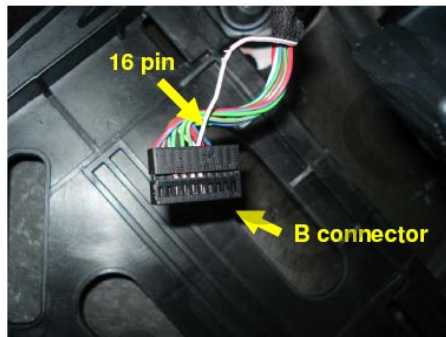
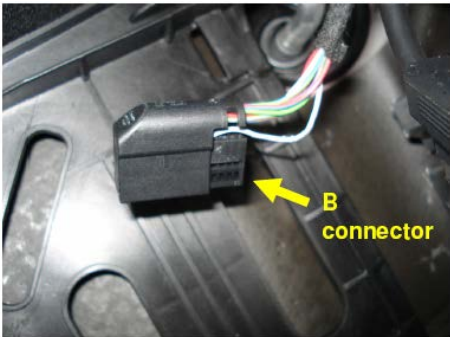
3.4 Using Original NAVI button

※ If you want to use OEM NAVI button for changing modes, you need to connect to 16 pin connector wiring.

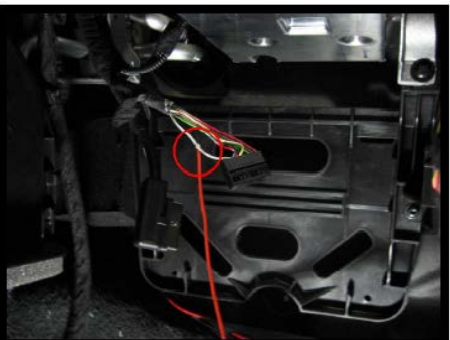


① Attention!!!

Find A, B connectors of MMI module.
For safety purpose, unplug MMI power cable (B connector) and then disconnect A connector.



② Find 16th pin after B connector unplugging .



③ Connect Navi orange wire from Power cable to the 16th pin of the connector.

4. Troubleshooting

Q. I can not switch A/V sources.

- A. Check IR or Ground cable, and MODE button connection. Check LED lamps in the interface, if they are not on, check power cable.

Q. All I got on the screen is black.

- A. Check whether interface second LED lamp is on. If not, check whether connected A/V sources operate well. (Second lamp indicates that connected AV sources are working well.) Check interface connection.

Q. Displayed image color is not proper. (too dim or not suitable color)

- A. 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" position.

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

- A. Check DIP switches settings.

Q. OEM image is not displayed.

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

Q. Screen only displays white picture.

- A. Check LCD out cable connection. In case cable is connected well and the screen still displays white picture inform supplier or manufacturer.