release date : 2011.07.01
model : QVI-AUD09-V5 / product code : AUD09-1105-001

AUDI 2009-2011+
Specification & Installation

Vehicles coming with 3G/3G+ MMI

Contents

1. Before installation

2. SETUP

3. Installation

4. Troubleshooting

1.1 Main specification

1. Input Spec. (MULTI VIDEO INTERFACE)
    - 1 x Analog R, G, B, C sync
    - 1 x CVBS(REAR CAMERA) Input. (Rear camera source)
    - 3 x A/V (NTST & PAL) Input.
    - 1 x LCD Input (Car system Input)

2. Output Spec.
    - 2 X CVBS OUTPUT (Video Out for installing Headrest monitor)
    - 1 x Audio OUTPUT
    - 1 X LCD OUTPUT(LCD Operation)

3. Power Spec.
    - Input Power : 10VDC ~ 16VDC
   - Consumption Power : 6WATT (in maximum level)

4. Mode change
    - Input Video skip : able to skip each input source via adjusting DIP switch
    - Control by using the remote controller
    - Able to change a mode to another mode by using the mode switch
    - Able to change modes and control DVD, CMMB via touching the screen
   - Able to change modes via using the original buttons(navigation)

1.2 Features

- DVD, CMMB and navigation control via touching screen

- DVD, CMMB control via registering values of the buttons on the remote controller (only for models including remote controller)

- Installation from the direction of the command

- DVD, CMMB, navigation control via MMI controller

- Plug & Play (the LVDS cable offered)

- Control of position of the DVD, navigation image

- Screen Display improvement (user convenience-intended interface)

- Remote controller offered

- Mode change via mode switch

- Control of rear camera power

1.3 System diagram

NVI Touch Input

Remote Control

Switch for source toggle

MMI Controller

Navigation Input

A/V1

A/V2

A/V3

CVBS (Rear Camera)

DVD

DMB

MCU

LCD In/Out

VIDEO CIRCUIT

VIDEO MUX

POWER CIRCUIT

TOUCH

A/V OUT

HEADREST MONITOR

Power Input (+10VDC~+16VDC)

DIP S/W   NAVI
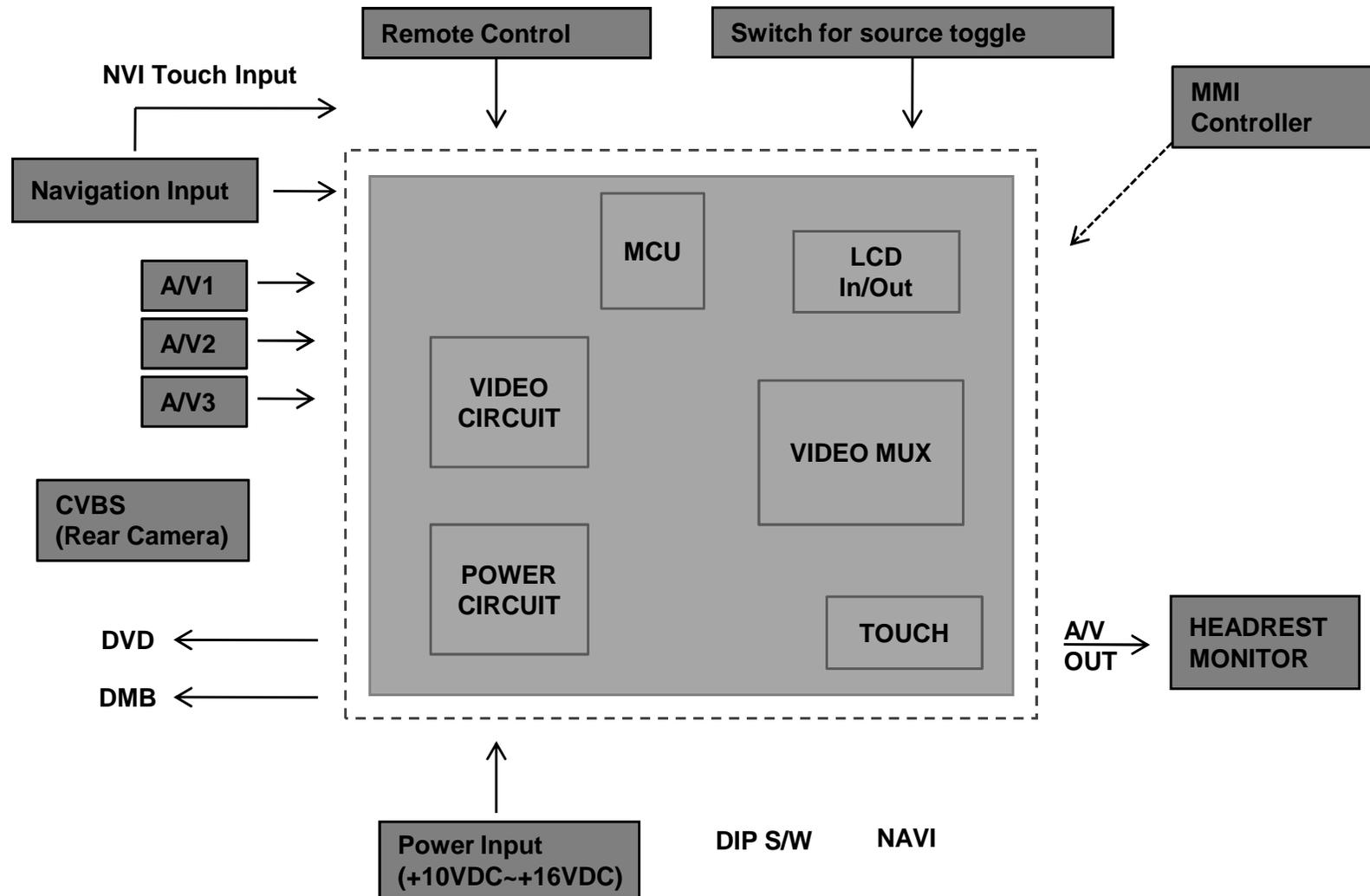
1.4 Components
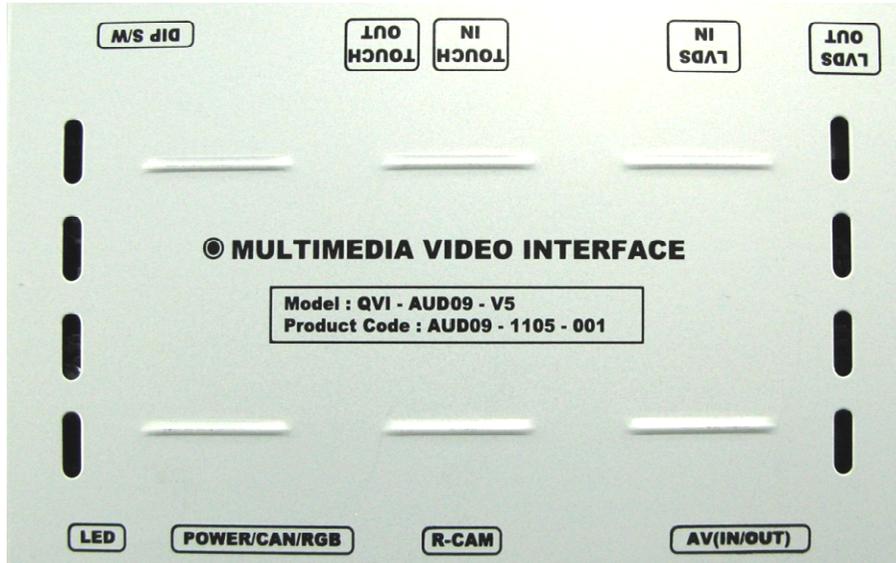
Main unit * 1pc.

IR cable * 1pc.

MODE cable * 1pc.

AV cable * 1pc.
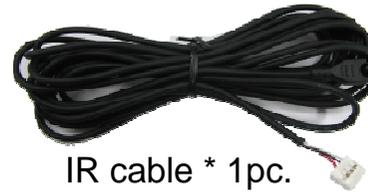
POWER cable * 1pc.

RGB cable * 1pc.

REAR CAMERA POWER cable * 1pc.

TOUCH IN cable * 1pc.

TOUCH OUT cable * 1pc.


LVDS IN cable * 1pc.

1.5 Exterior
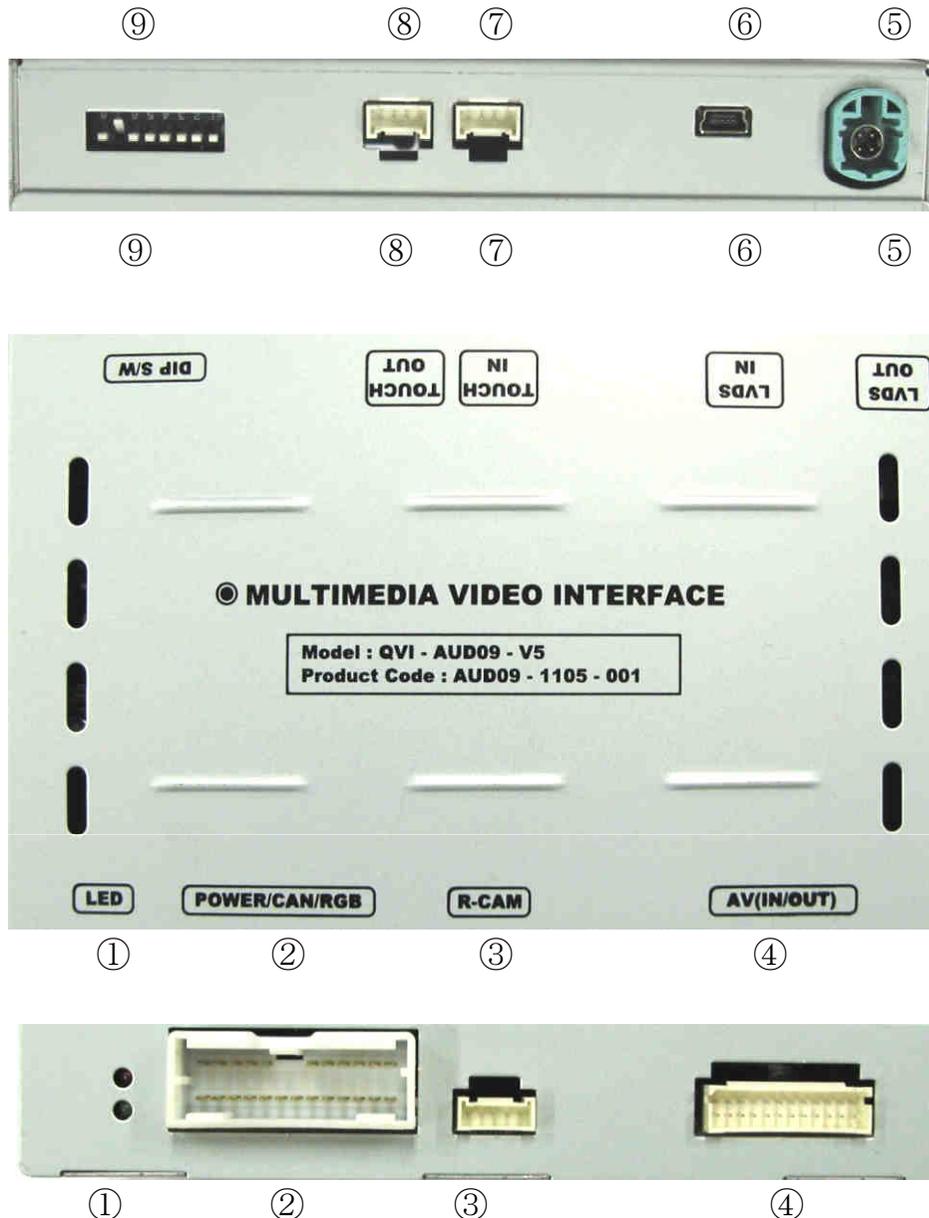
Dimension

Horizontal length 146mm
Vertical length 88mm
Height 25mm

① LED

② POWER/CAN/RGB

③ Rear camera

④ AV(IN/OUT)

⑤ LVDS OUT

⑥ LVDS IN

⑦ TOUCH IN

⑧ TOUCH OUT

⑨ DIP S/W

2.1 DIP switch

#PIN	function	DIP S/W selection
1	RGB INPUT	ON : Skipping RGB Mode OFF : RGB Display
2	A/V 1	ON : Skipping A/V 1 OFF : A/V1 Display
3	A/V 2	ON : Skipping A/V 2 OFF : A/V2 Display
4	A/V 3	ON : Skipping A/V 3 OFF : A/V3 Display
5	Monitor Size	ON : 7inch LCD with 800*480 Resolution OFF : 6.5inch LCD with 400*240 Resolution
6		**N.C. - NOT USED**
7	Rear Mode	ON : External Rear Camera OFF : OEM Rear Camera
8		**N.C. - NOT USED**

※ ON : DOWN, OFF : UP

※ DIP S/W usage
[AUDI09 6.5"]
- Input mode to intend to use
  : A/V3(DVD), Navigation (RGB)
- Rear view camera : installation on CVBS4
- When the original navigation is NOT installed

▷ DIP S/W : 1 → OFF
▷ DIP S/W : 2,3 → ON (input mode skip)
▷ DIP S/W : 4 → OFF (A/V3 available)
▷ DIP S/W : 5 → OFF
▷ DIP S/W : 7 → ON (CVBS4 available)

2.2 Remote controller

Key	Function
POWER & PIP	**NOT USED**
MENU	OSD Menu activator
OK	Make a selection
▲	Move UP
▼	Move DOWN
◄	Move LEFT **(or press 2 seconds - Factory Mode implementation)**
►	Move RIGHT **(or press 2 seconds - RESET ALL settings to Factory)**

2.3 Original buttons in car

NAVIGATION implementation
FUNCTION Temporarily Unavailable
① move upward
② move downward
③ magnification
④ reduction
⑤ confirm; press 2seconds long-menu implementation
⑥ return; press 2seconds long-현재지|
⑦ setup for destination; press long 2seconds- driving in night mode
⑧ mode change
⑨ move leftward
⑩ move rightward

DVD, CMMB implementation

⑤ confirm
⑨ move counterclockwise
⑩ move clockwise

※ If you press any button among the three buttons, DVD/CMMB OSD menu will appear on the screen.

Mode change

If there is the MODE handle button in car and **CAN wire** is connected, driver can change modes with the **MODE** button.

Press long : return to main image
Press short : mode change

2.4 OSD implementation

OSD implementation - DVD

To implement DVD OSD menu, installer must install DVD system on AV1 and connect "DVD IR" cable among navigation cables with remote sensor cable of DVD.


>
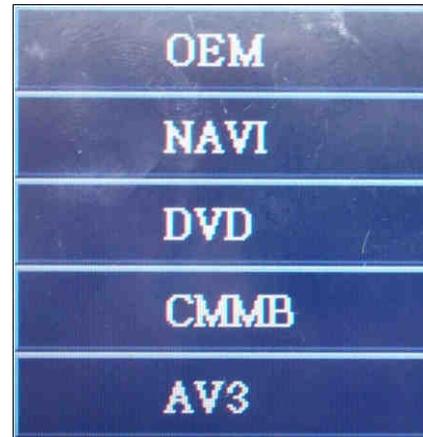
First of all, if you touch the screen on mode "AV1", you can see the menu as shown left. And then if you do NOT touch anything on the screen 5 seconds or more long; or if you touch the screen except the menu, the menu will disappear.
At that time, if you choose "INPUT", you can get out of the menu and see the mode change menu.(left picture)

Here is a picture of the mode change menu. If you select the channel which you want, then the channel will be changed to that.(right picture)

OSD implementation - CMMB, NAVI

DVD, DMB, navigation menu is available in English or Chinese. After implementing OSD menu with pushing "MENU" button on remote controller, choose the language that you want to use.

>>>
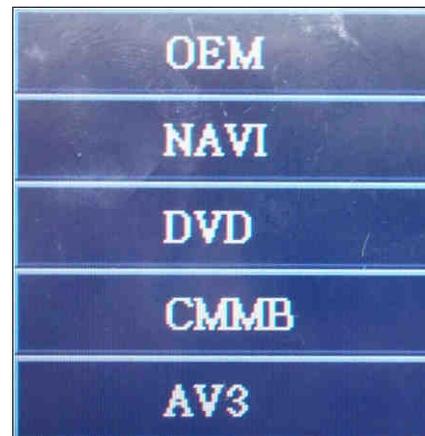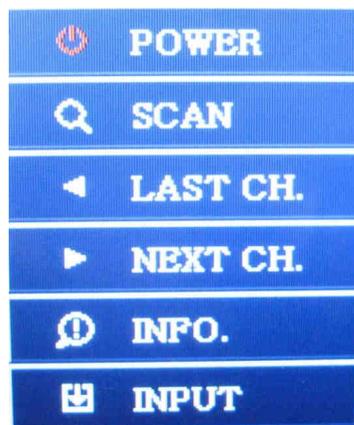

As shown above, if you touch the screen on mode "AV2", you can see the menu as shown left. And then if you do NOT touch anything on the screen 5 seconds or more long; or if you touch the screen except the menu, the menu will disappear.(left picture)

Here is a picture of the mode change menu. If you select the channel which you want, then the channel will be changed to that.(right picture)

2.5 OSD (on screen display)

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

Analog RGB

Analog RGB
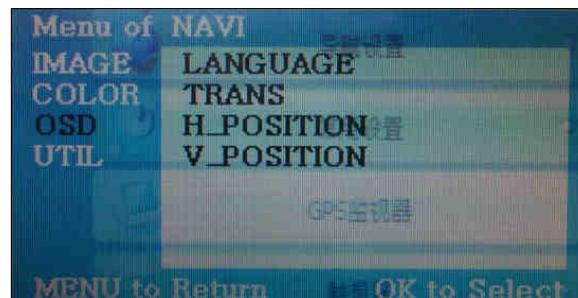
Analog RGB

Video

Video
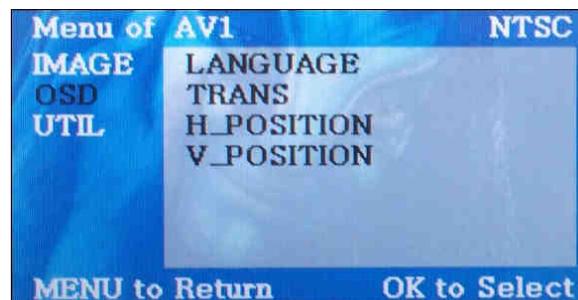
Video

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

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

UTIL
- FACTORY RESET : To reset all the values about navigation, DVD screen to factory default. (NOT available for reset of the position value of images, only for functions inside OSD menu)

2.6 Factory mode

Factory mode: press ◄ button 2 seconds long.
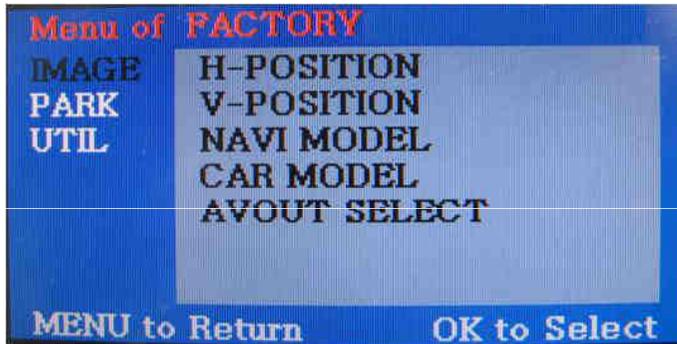
IMAGE
- H-POSITION : Control over horizontal movement of screen
- V-POSITION : Control over vertical movement of the screen
- NAVI MODEL : DEFAULT, KD900(WVGA), MD7000(WVGA),MYVI(WVGA),PAPAGO(WVGA)
- CAR MODEL : DEFAULT, 2011 A7,8-NEW
- AVOUT SELECT : DEFAULT, AV1, AV2, AV3
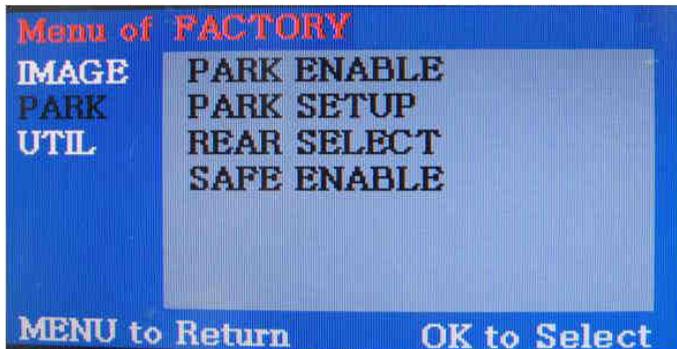
PARK
- PARK ENABLE : Setup of rear view parking guide line
- PARK SETUP : Control over position of rear view parking guide line (Refer to page14.)
- REAR SELECT : CAN, LAMP
- SAFE ENABLE : To select whether to use SAFE function(NOT to allow watch video while driving) or not

UTIL
- CALIBRATION : Touch calibration (Refer to page15.)
- IR MEMORY : To register value of buttons on the remote controller (Refer to page16~17.)
- DVD TYPE : Setup for the type of DVD (Refer to page18.)
- CMMB TYPE : Setup for the type of DMB (Refer to page18.)
- MMI CONTROL : To enable control DVD and CMMB via UI on screen
- FACTORY RESET : To reset all the value in factory mode

2.7 Rear view parking guide line

Factory mode: press ◄ button 2 seconds long.
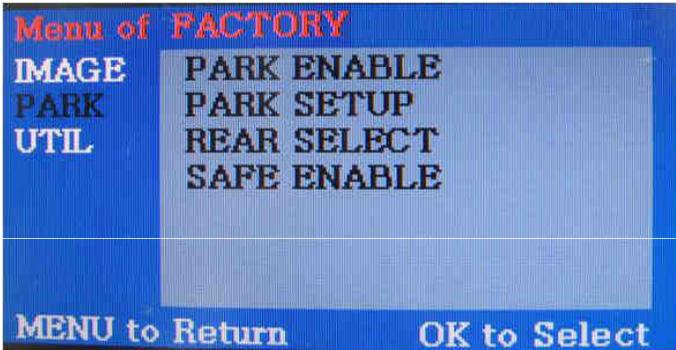
① Register the value needed on the "PARK ENABLE" as "ON" in the PARK section as shown left. **(default – ON)**
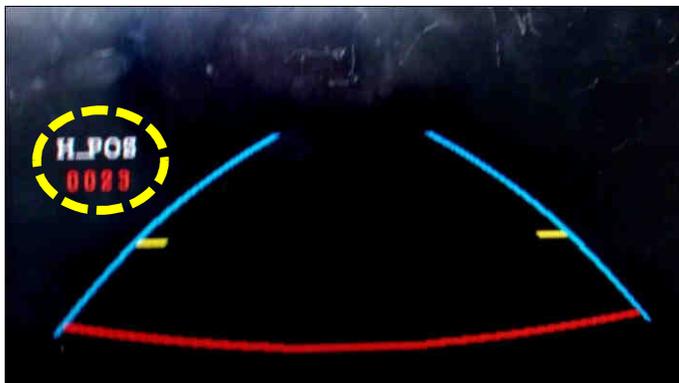
② If you get rear gear after setup, parking guide line will appear on screen as shown left. Now that you push "OK" button, you can see "H-POS" on the left of screen. Then adjust horizontal position of the guide line.
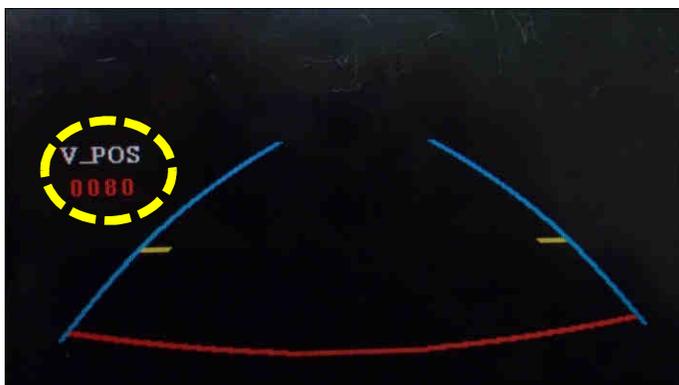
③ After adjusting horizontal position, press "OK" on the remote controller. Then you can see "V-POS" on the left of screen. At that time you can adjust vertical position of the guide line.

2.8 Touch calibration

    >>>

① First of all, press ◄ button on remote controller 2 seconds long. Then you can access to the FACTORY mode.

② Register "YES" when the CALIBRATION option is selected as shown above.

③ Then you can see "touch calibration" on screen **about 2 seconds long** as shown above. After the word "touch calibration" disappear, touch calibration function will implement. (Just touch "╋" shape on screen.)
If you succeed, you can see "success". If not, you will see "failure".

2.9.1 Remote controller button

Registering value of remote controller buttons?

When you want to control DVD and DMB via touch screen (using OSD menu) with other models besides already registered option-SANYO and NECVOX, you can register value of DMB 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 2 seconds long. Then you can access to the FACTORY mode. And go to IR MEMORY, UTIL.

There are two options in IR MEMORY as shown above; DMB and DVD.
Then you select AV source that you want to set among them.

② This is a window for register of DVD' s remote controller button value. At the moment just select a menu that 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.)

Instruction>
a. Select "POWER" in OSD menu, then press "OK" on remote controller. (as shown above)
b. If the marked area flickers as shown above, press "POWER" button on the remote controller of DVD that you want to use. (continued in the next page)

2.9.2 Remote controller button
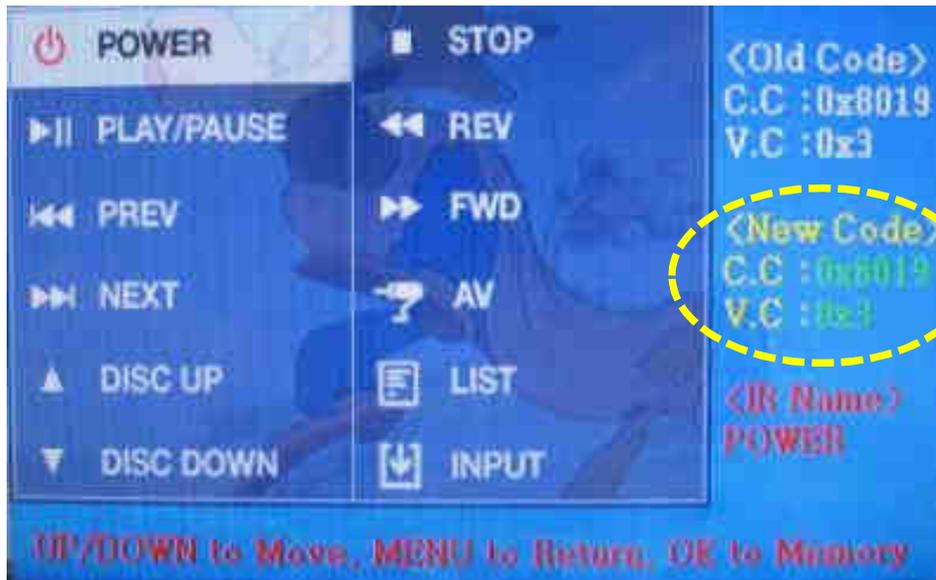
Instruction> continued…
c. The values that you registered will appear as green text in the marked area on pressing the button. And the values will be saved automatically.
d. Register remain buttons' value in OSD menu like the above-mentioned.

③ After register, select "INPUT" in OSD menu and press "OK". Then you can see confirmation window as shown above. At the moment, if you choose "YES", all the values that you entered 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" on screen, the data is saved clearly and you can control DVD via touch screen. BUT, you MUST change the option in DVD(DMB)/UTIL/FACTORY to "USER". (Refer to page18.)

2.10 DVD, CMMB model selection

Factory Default : DVD TYPE – NECVOX/SANYO (For Chinese DVD)
CMMB TYPE – ? (For Chinese DMB)

DVD TYPE
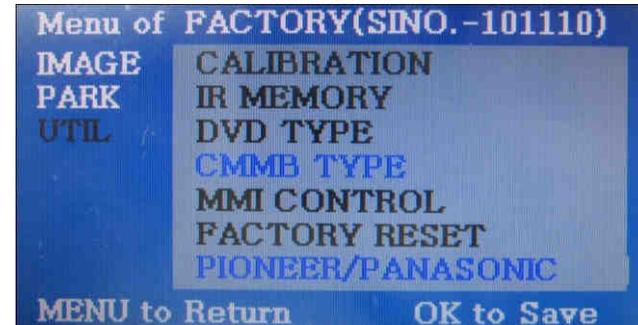
CMMB TYPE

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".
Unless you do this process after saving the data, you can NOT control DVD/CMMB via touch screen.

DVD TYPE : NEC/SANYO, DV-108, SANYO-1, SANYO-2, USER
CMMB TYPE : PIONEER/PANASONIC, USER

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

3.1 Installation diagram

NAVIGATION

USB cable

USB Touch Controller

X+
Y+
X-
Y-

Control box

monitor

Touch screen

LCD cable enclosed in our package

Original LCD cable

DIP S/W

TOUCH OUT

TOUCH IN

LVDS IN

LVDS OUT

VIDEO INTERFACE

LED

POWER/CAN/RGB

R-CAM

A/V(IN/OUT)

AUX-ON **(N.C.)**

REAR

OPT2 **(N.C.)**

MODE : **Toggle S/W**

RGB

IR

CAN-L

CAN-H

IR-AV3 (DTV)

IR-AV2 (DVD)

PB12 **(N.C.)**

MMI (NAVI button)

IR-AV1 (NAVI)

GND

PARKING **(SAFE)**

ACC

REAR CAM POWER +12V

REAR CAM POWER -12V

REAR C

AV1

AV2

AV3

AV/OUT

Yellow

Yellow

RED

White

VIDEO

AUDIO R

AUDIO L

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.

3.3 Installation

3.3.1 Separating monitor, connecting LVDS-IN cable and LCD cable

Rear view of monitor

Rear view of command

MULTIMEDIA VIDEO INTERFACE

Model : QVI - AUD09 - V5
Product Code : AUD09 - 1105 - 001
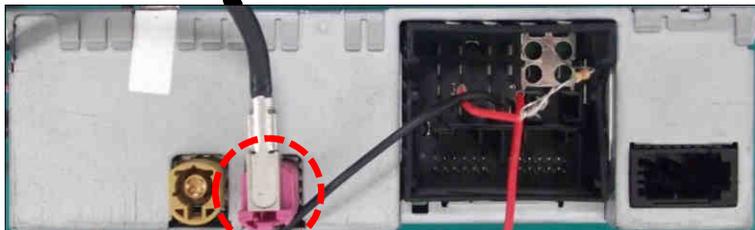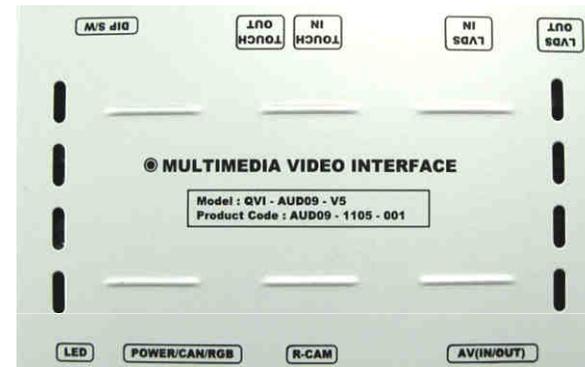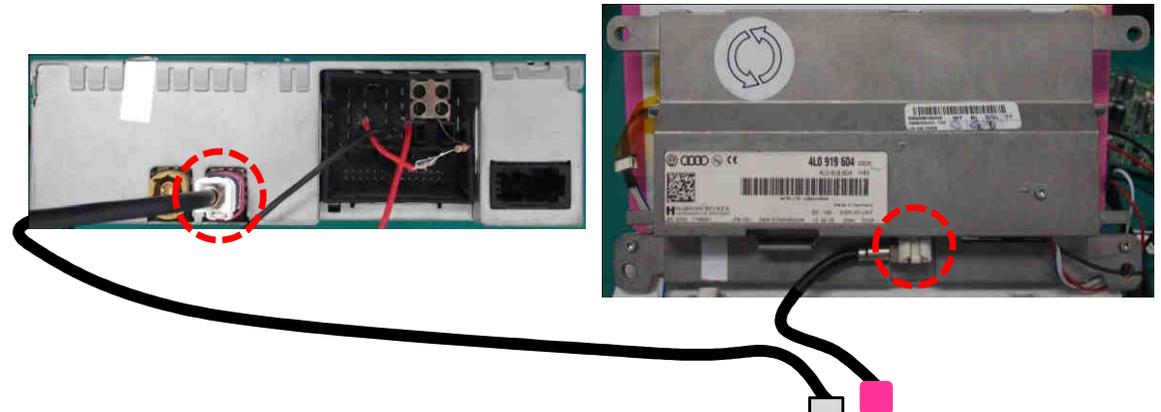
① Here are pictures of the rear view of the disassembled monitor and command.

You can see that original LCD cable of monitor is connected to the command in the picture above.

② **Connect the original LCD cable to "LVDS OUT" of the interface after disconnecting it from the command.**

And connect the LVDS IN cable enclosed in our package to "LVDS IN" of the interface. Then connect the opposite end of the cable to the spot that the original LCD cable is connected of command

3.3 Installation

plug & play type for
TOUCH OUT cable

navigation

② Connect the TOUCH OUT cable enclosed in our package to "TOUCH OUT" of the interface. Then connect the opposite end of it to the touch cable of navigation system.

DIP S/W   TOUCH OUT   TOUCH IN   LVDS IN   LVDS OUT

⊛ MULTIMEDIA VIDEO INTERFACE

Model : QVI - AUD09 - V5
Product Code : AUD09 - 1105 - 001

LED   POWER/CAN/RGB   R-CAM   AV(IN/OUT)

① Connect the TOUCH IN cable enclosed in our package to the connector of touch screen. And connect the opposite end of it to "TOUCH IN" of the interface.

3.4 Using original navigation button

When you use the mode change function via original navigation button, you have to connect 16pin as shown below.
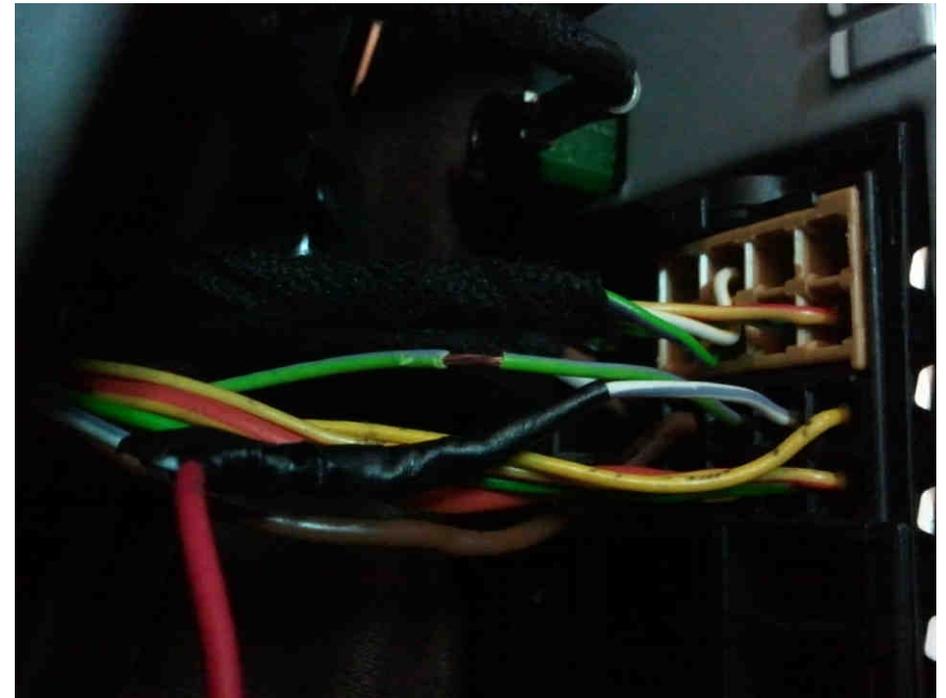

- Case of A8 -

Find a bunch of cables connecting DVD box from the passenger seat. And connect the white one among the cables with MMI cable of POWER cable enclosed in our package.

** If you handle A8 vehicle, connect the white/blue cable to the orange cable in our power cable as shown top right.

3.5 Connecting CAN cable

If you connect the CAN cable in models including "MODE" handle button, you can change modes via "MODE" button.
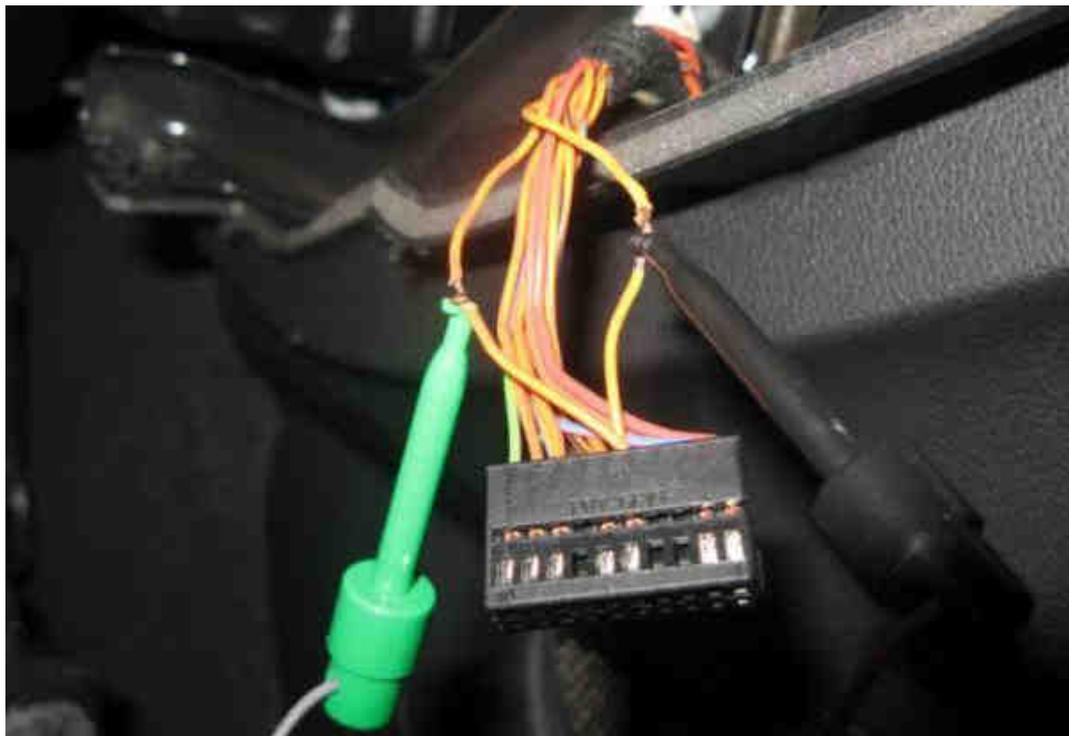
Find the red connector from the passenger seat. After disassembling it, connect the CAN(H), CAN(L) enclosed in our package to the original CAN cable respectively.

PIN No.15 : CAN High

PIN No. 5: CAN Low

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.