

Video Interface for Audi A6, A7, A8 of 2015

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.

Table of Contents

1. Specifications	
1.1 Main Specifications	4
1.2 Features	5
1.3 System Diagram	6
1.4 Components	7
2. Installation	
2.1 Installation Diagram	9
2.2 Installation	10
3. Settings	
3.1 DIP Switch	14
3.2 Remote Control	15
3.3 FACTORY MENU	
3.3.1 IMAGE, PARK	16
3.3.2 UTIL1	18
3.3.3 UTIL2	20
3.4 Original Button Use	25
3.5 OSD	26
4. Trouble Shooting	28

1. Specification

1.1 Main Specifications

1. Car Compatibility
AUDI Cars in combination with MMI 3G, 3G+
2. Components
Interface* 1EA
3. MULTIMEDIA INTERFACE Input Specification
 - 2 * A/V Input (Video External Input).
 - 1 * CVBS(Rear Camera) input
 - 1 * CVBS(Front Camera) input
 - 1 * Analog RGB input (Navigation)
 - 1 * LCD input (Car System input)
4. MULTIMEDIA INTERFACE Output Specification
 - 1 * LCD Output
5. Power Specification
Input Power : 8VDC ~ 18VDC
Consumed Power : 5WATT
6. Switch input mode
 - External display skip function : Able to control each video input by DIP switch
 - Able to change input mode by remote control
 - Able to connect rear camera by either CAN or rear lamp cable

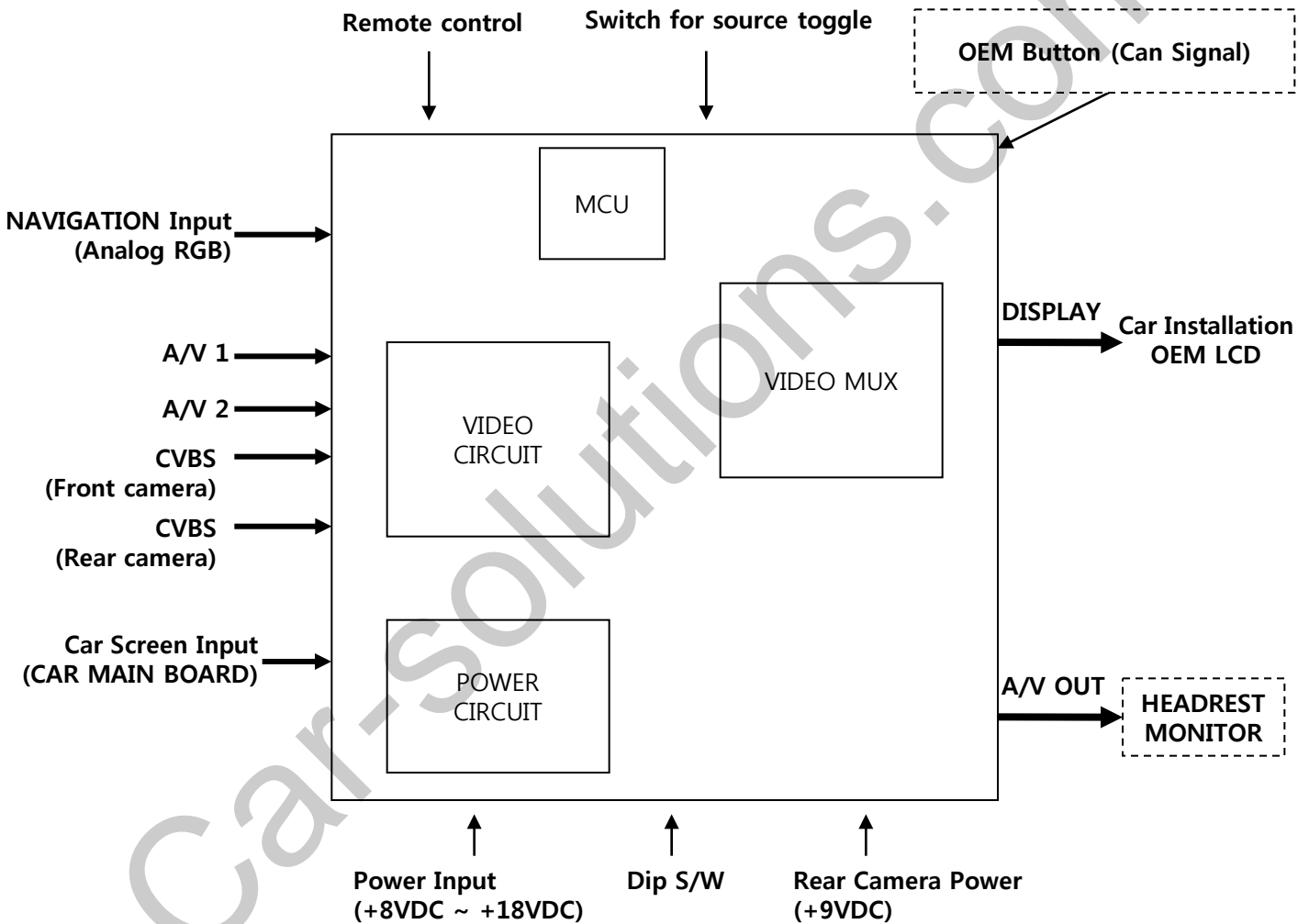
1. Specifications

1.2 Features

- External Device(DVD, DTV) is controlled by Multi Media Touch GUI
- It is possible to change the position of AV mode screen but the position of OEM screen is not changed.
- Improvement in Screen Display (User friendly interface)
- Able to change the mode by OEM button
- Power for rear camera is supplied(Activates when shifting into reverse)
- Dynamic PAS(Parking assistance system)+PDC, moving parking line according movement of steering wheel

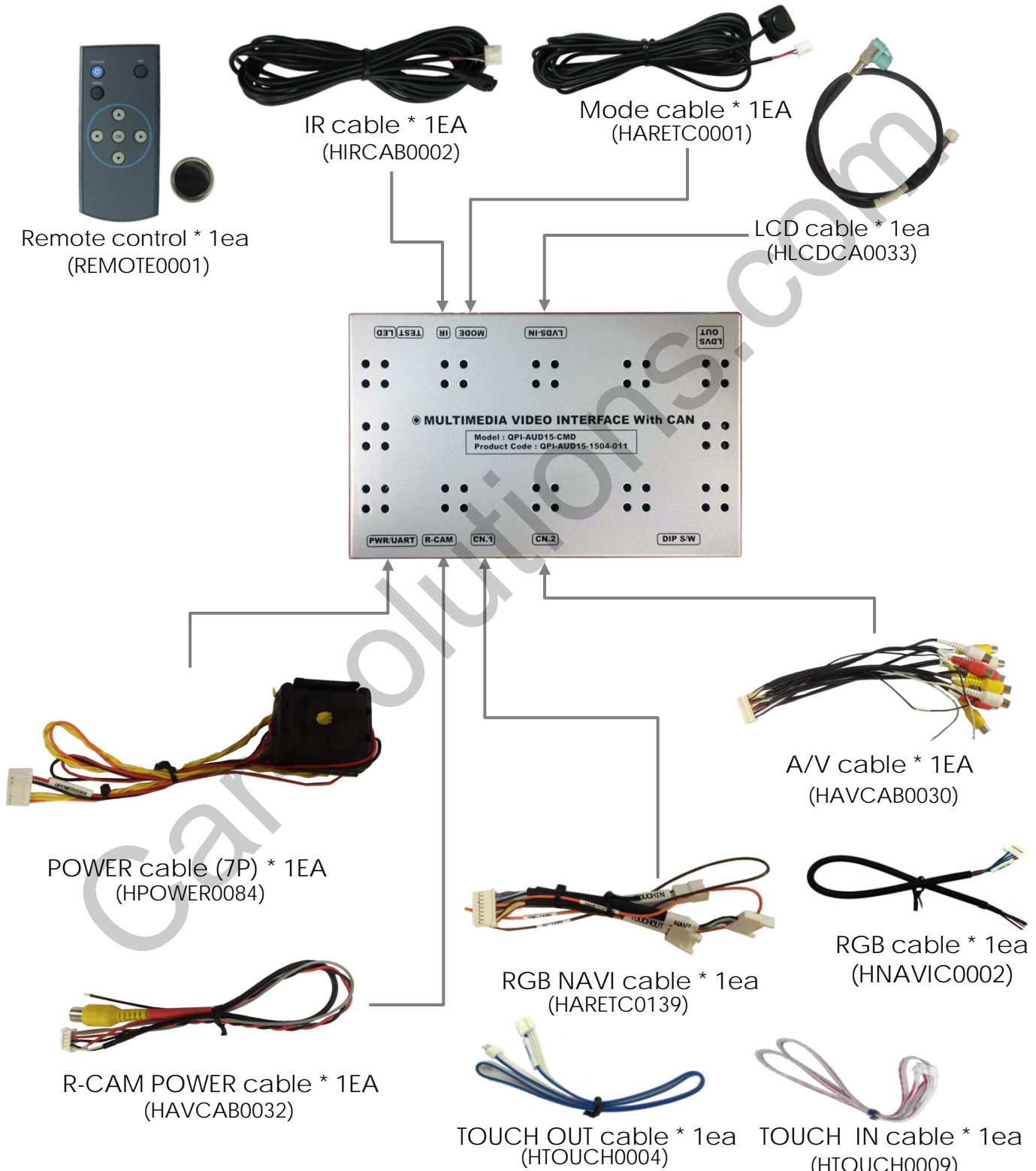
1. Specifications

1.3 System Diagram



1. Specifications

1.4 Components



1. Specifications

1.4 Components(Option)



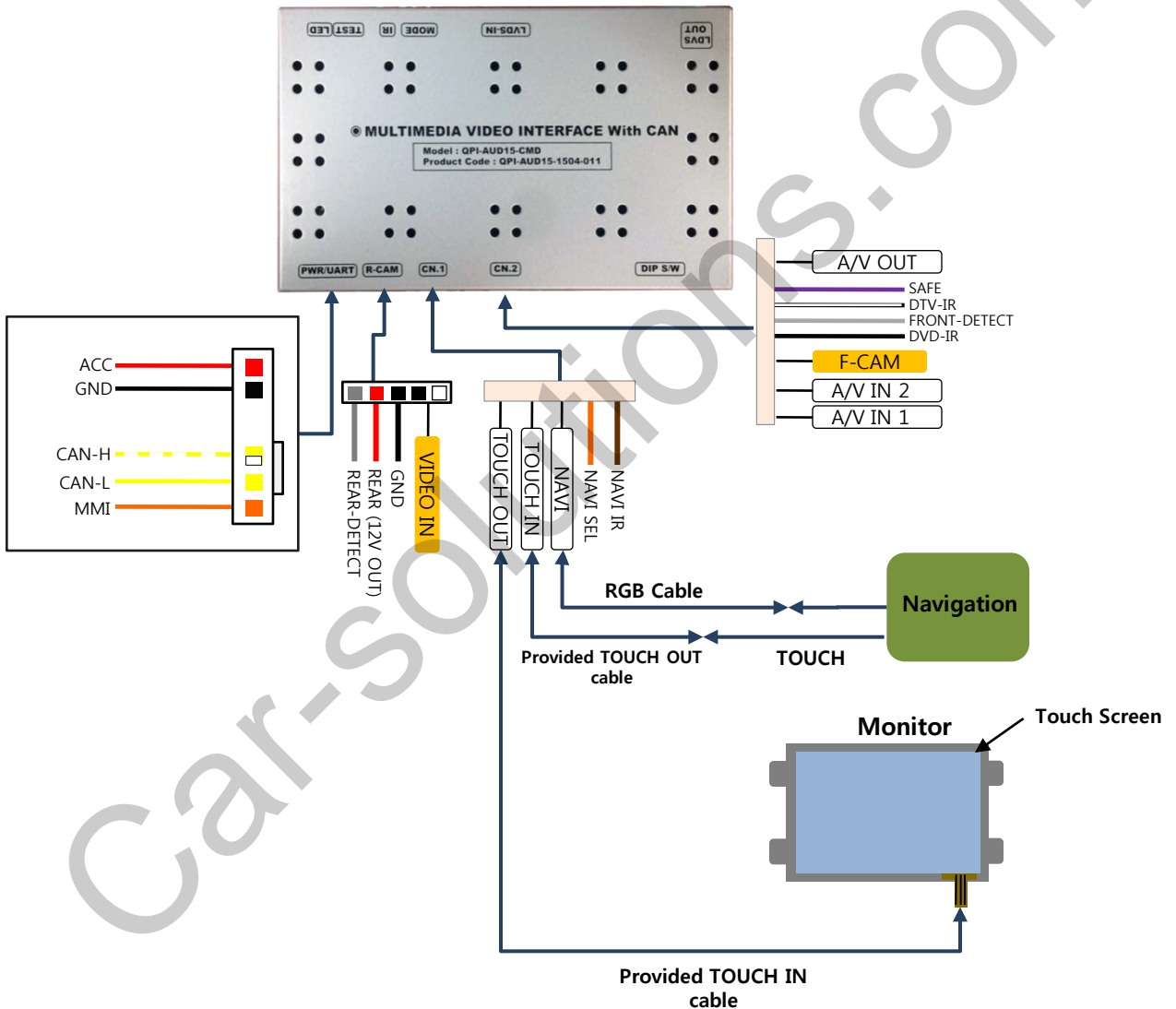
7" Touch Panel
(TOULCD0013)



8" Touch Panel
(TOUPAN0004)

2. Installation

2.1 Installation Diagram

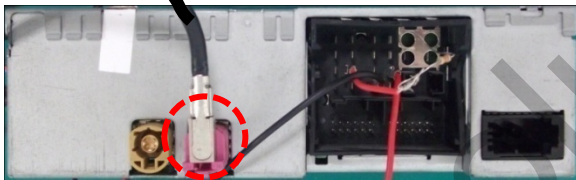


2. Installation

2.2 Installation



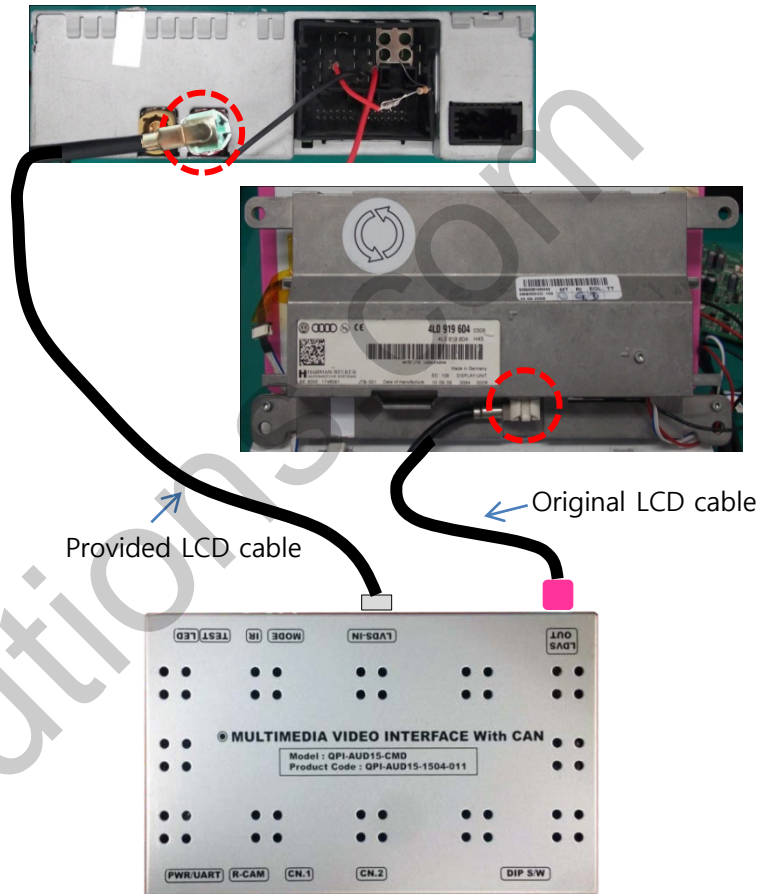
Rear View Monitor



Rear View Command

- ① Disassemble the monitor and the command from Car. Pictures are attached for your reference.

As you can see above, an original LCD cable of monitor is connected to the command



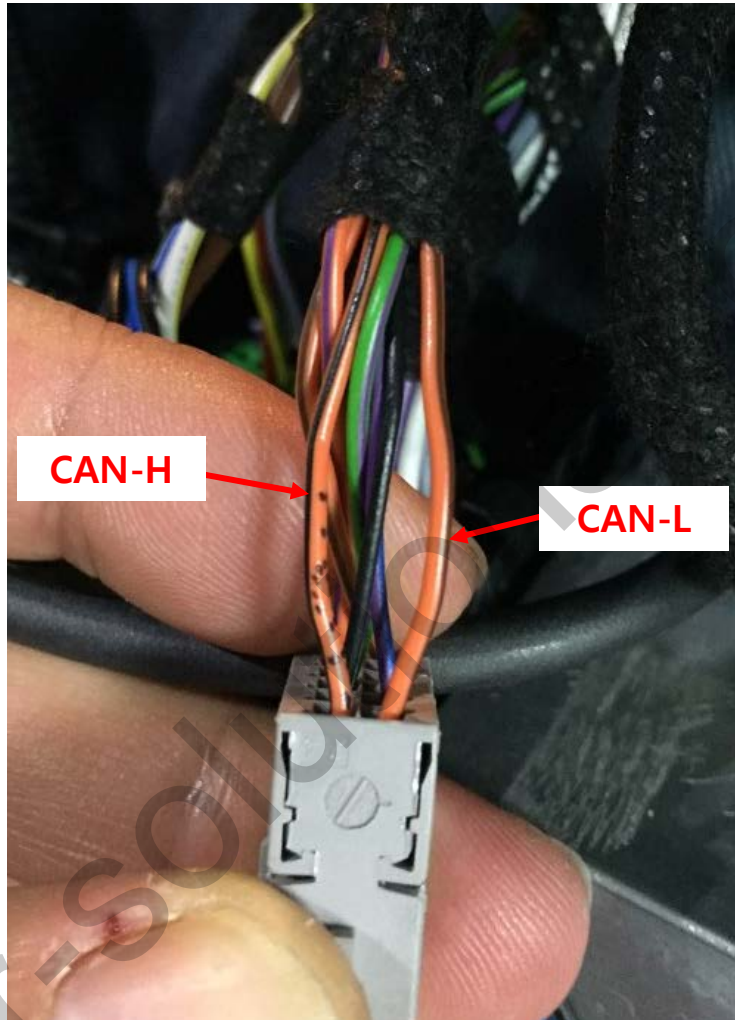
- ② Connect the original LCD cable to "LCD-OUT" of the Interface after disconnecting it from the command.

And connect the LCD 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

2. Installation

2.2 Installation / CAN Connection

– MMI Controller(AUDI TT)

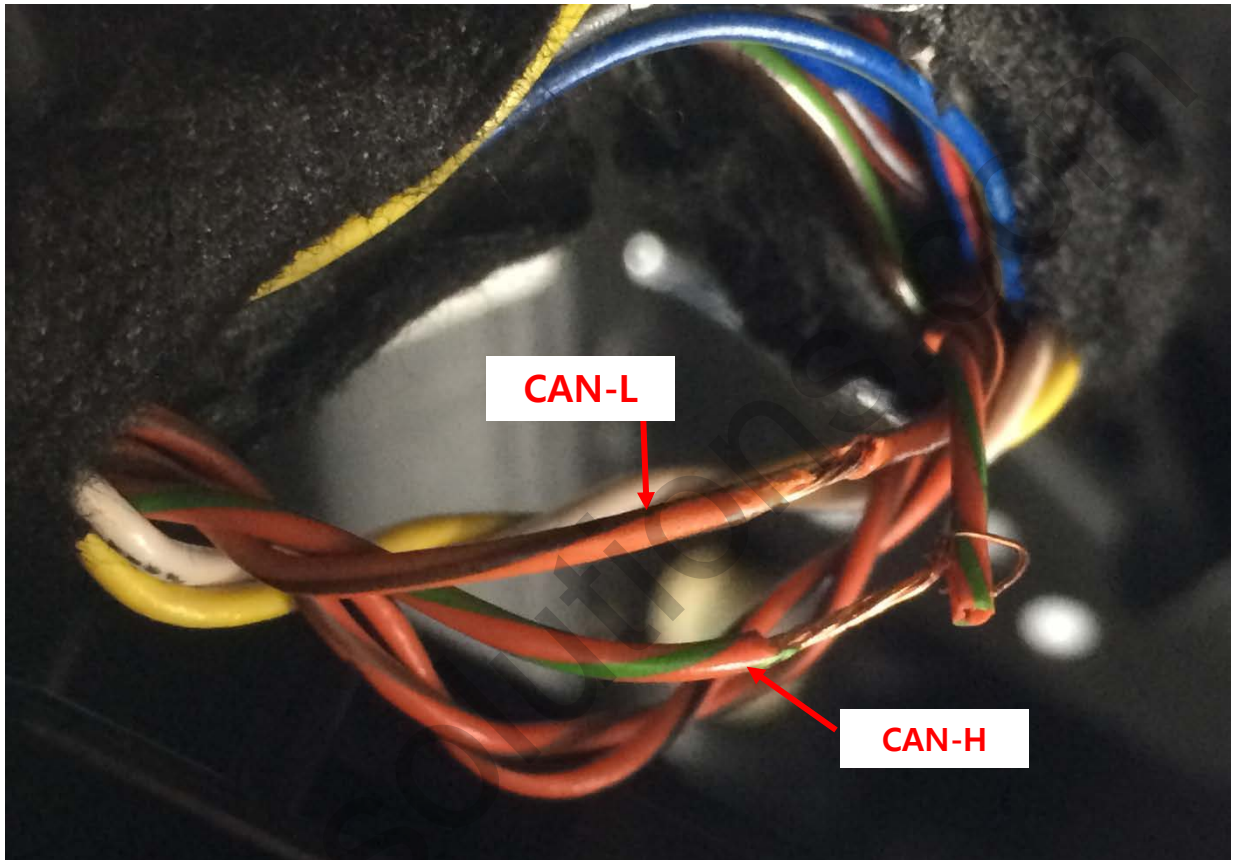


- ※ Find OEM cable from the command behind
 - Connect provided CAN-H wire (Yellow+White) to OEM CAN-H wire (Orange+black)
 - Connect provided CAN-L wire(Yellow) to OEM CAN-L wire (Orange+Brown)
- ※ In case of TT, Rear view can be activated by rear lamp connection only.
Unable to use PAS function

2. Installation

2.2 Installation / CAN Connection

– GEAR, PAS(A6, A7)

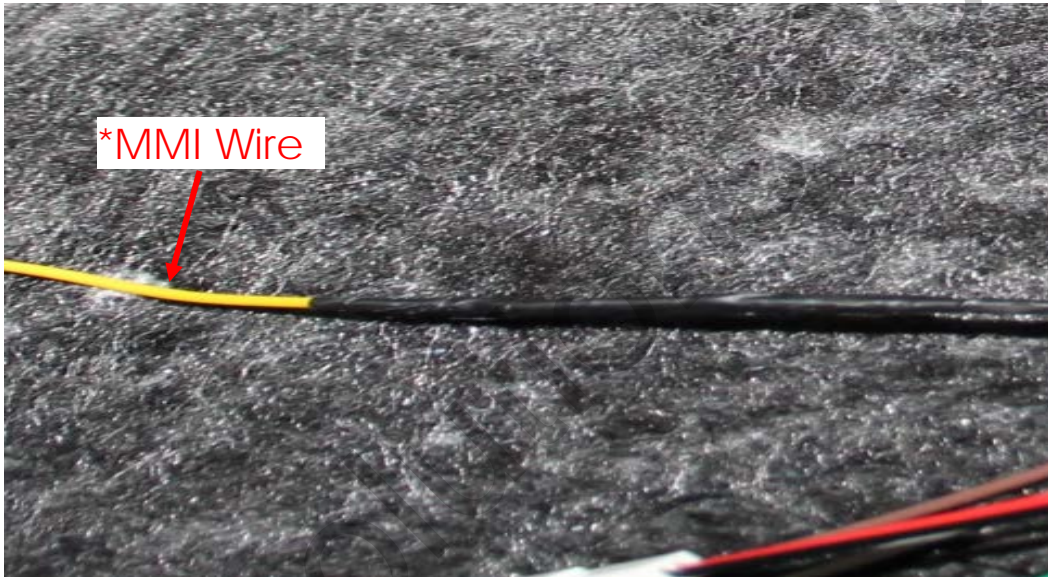


-
- ※ Find OEM cable behind the center console
 - Connect provided CAN-H wire(Yellow+White) to OEM CAN-H wire(Orange+Green)
 - Connect Provided CAN-L wire(Yellow) to OEM CAN-L wire(Orange+Brown)

2. Installation

2.2 Installation / MMI wire Connection

– MMI Controller(A6, A7)



-
- ※ Find MMI cable behind the Radio unit
 - Connect provided MMI wire(Orange) to OEM MMI wire (Yellow+White)

3. Settings

3.1 DIP Switch

※ Example of DIP S/W use

- 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 (OEM Navigation use)
- ▷ DIP S/W : 2,3 → OFF (A/V1, 2 display)
- ▷ DIP S/W : 4 → OFF (A/V3 display)
- ▷ DIP S/W : 5 → OFF (High Resolution)
- ▷ DIP S/W : 6 → OFF
- ▷ DIP S/W : 7 → ON (Display external rear Camera)
- ▷ DIP S/W : 8 → OFF

PIN	Function	Dip S/W Selection
1	Displaying RGB input	ON : RGB mode skip OFF : RGB 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	Setting for monitor resolution	ON : Low resolution OFF : High resolution
6		N.C
7	Setup of rear camera use	ON : CVBS4 OFF : MAIN
8	Reset factory settings (not use for user)	ON : Product factory reset OFF : DEFAULT

※ 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. www.car-solutions.com support@car-solutions.com

3. Settings

3.2 Remote Control

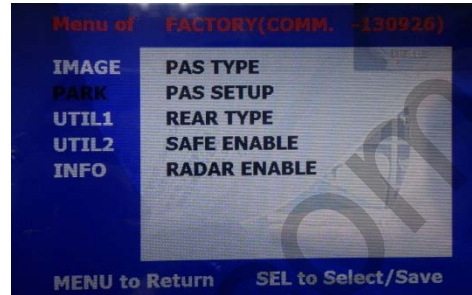


Key	Function
POWER & PIP	Unavailable
MENU	ActivatiesOSD menu
OK	Making a selection, changing image display
▲	Moving upward
▼	Moving downward
◀	Moving leftward (If you press this button 2 seconds long, you can access the factory mode.)
▶	Moving rightward (If you press this button 2 seconds long, you can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

3. Settings

3.3.1 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 and Selecting type 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

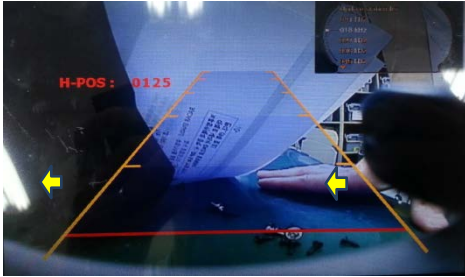
3.3.1 FACTORY MODE-IMAGE, PARK

PAS SETUP

Go to Factory Menu and choose PAS SETUP

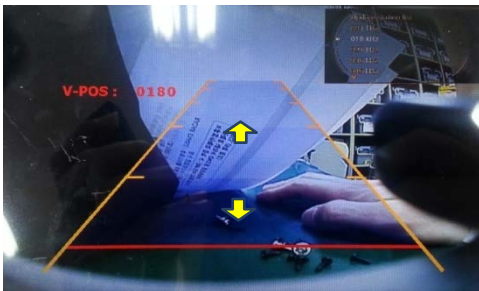
Then, Press OK button to change the settings (H-POS → V-POS → TYPE)

❑ H-POS



In H-POSITION, use ◀, ▶ on remote control, to adjust parking guideline left and right.

❑ V-POS



In V-POSITION, use ▲, ▼ on remote control, to adjust parking guideline up and down.

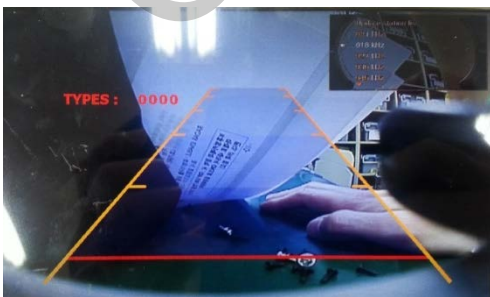
❑ TYPE



In TYPE, use ▲, ▼ on remote control, to select parking guide line Type for rear camera.

(0001 : wide parking guide line

0000 : narrow parking guide line



3. Settings

3.3.2 FACTORY MODE–UTIL1

▪ Setup for navigation



☐ UTIL1 – NAVI MODEL

Navigation resolution

DEFAULT

- : Default, 480X234 Low resolution
KD-900(WVGA)
- : 800x480 High resolution, Chinese version
LS-901(WQVGA)
- : 480x234 Low resolution,
Chinese and taiwanese version
WP9200(WVGA)
- : 800x480 High resolution, Israeli version
GI-8000N 3D(WVGA)
- : 800x480 High resolution, Korean version
GI-5000A(WVGA)
- : 800x480 High resolution, Korean version
I-ONE(WVGA)
- : 800x480 High resolution Korean version
PAPAGO(WQVGA)
- : 480x234 Low resolution, Taiwanese version
HDMI(WVGA)- In case of SMI installation
- : 800x480 High resolution

* Go into FACTORY/ IMAGE and adjust the position and the size of the navigation after setting the definition of the navigation

▪ Setup for car model



☐ UTIL1 - CAR MODEL

Selecting model of the car

AUDI S4
AUDI A4
AUDI A6
AUDI A7
AUDI A8
AUDI Q3
AUDI Q5
AUDI Q7

* Set pin#5 of DIP switch to the right size of the monitor after selecting model of the car.(Refer to page 14)

3. Settings

3.3.2 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



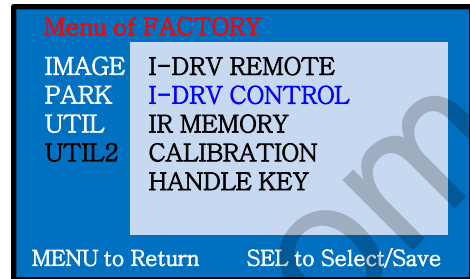
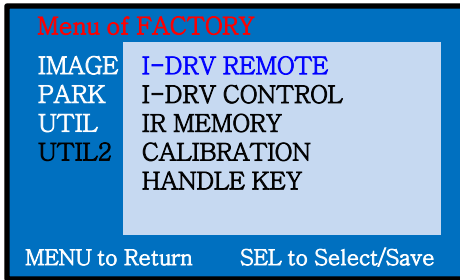
❑ UTIL1 - FACTORY RESET

FACTORY MODE RESET

3. Settings

3.3.3 FACTORY MODE-UTIL2

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



❑ UTIL2 - I_DRV REMOTE

Choose DTV and DVD model to use I_DRV function

LI-1DISC

NEC-6DISC

USER(In case of using IR MEMORY)

- Select DVD model: Setting on AV1 Mode
- Select DTV model : Setting on A/V2 mode

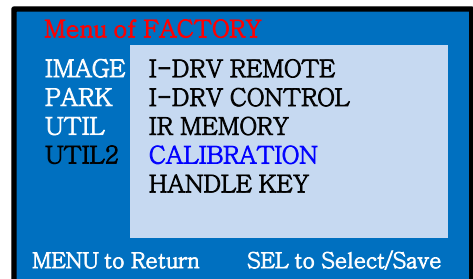
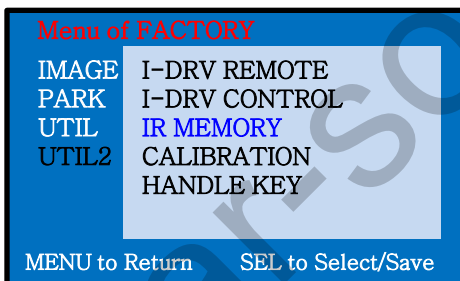
❑ UTIL2 - I_DRV CONTROL

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 – IR MEMORY

Able to control DVD(A/V1) and DTV(A/V2) by I-Drive control after the remote control for DVD and DTV is registered

※ Select "User mode" in UTIL2-I_DRV REMOTE.

(Connect IR cable of DVD&DTV to remote signal)

❑ UTIL2 – CALIBRATE

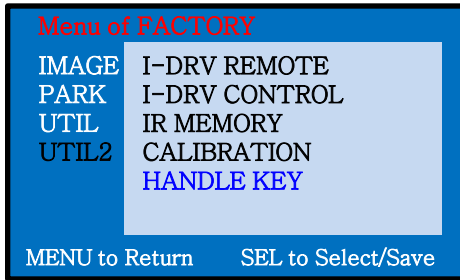
Touch Calibration

YES / NO

3. Settings

3.3.3 FACTORY MODE–UTIL2

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



☐ UTIL2 – HANDLE KEY

Selecting whether to use NAV button
(mode switch)

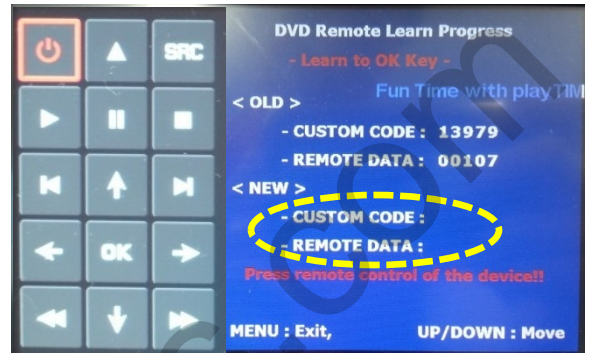
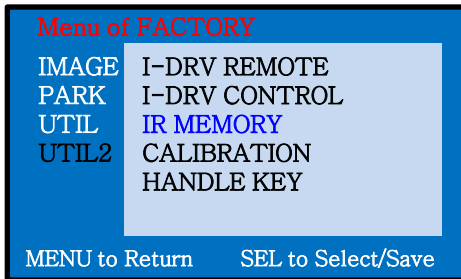
ON / OFF

3. Settings

3.3.3 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.

IR memory function can be used on DTV and DVD. Select either DTV or DVD to activate IR memory feature.

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

3. Settings

3.3.3 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, confirmation message will be shown as above.
(If data is saved, DVD TYPE and DTV TYPE will be changed to "USER" automatically.)

After the whole process above, the setting has been completed. So, DVD can be controlled by touch screen. However, go to Factory –UTIL2-I_DRV REMOTE and change it to "USER"

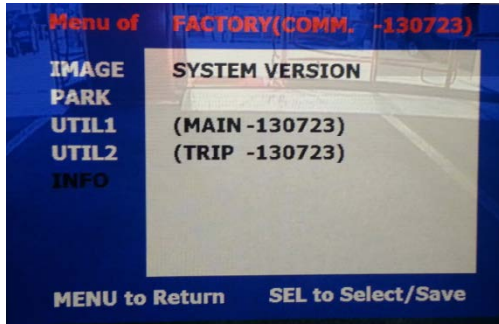
- ※ When touch the middle of the screen, you can control DVD, DTV using remote control UI via touch screen or MMI
- ※ If touch the screen in DVD(A/V1), DTV(A/V2) mode, remote control UI will appear
If touch the screen in RGB, A/V3 mode, mode switching UI will appear as below
If you want to see mode switching UI in DVD, DTV mode, Select "SRC" button



3. Settings

3.3.3 FACTORY MODE–UTIL2

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




☐ INFO

Check main version and Trip version

3. Settings

3.4 How to use original button

- ※ Press  button on the steering wheel to change the mode
 - * Long press : mode changes(RGB→A/V1~3→OEM mode)
 - * Short press : move to OEM mode.

- ※ Able to change the mode by pressing NAV button in MMI
 - * Long press : mode changes(RGB→A/V1~3→OEM mode)
 - * Short press : move to OEM mode.

- ※ Push MMI controller to 6 o' clock direction for long time to change the mode size **(Only available for TT)**



〈Full mode〉



〈Middle mode〉

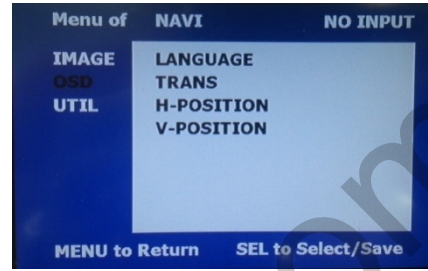
3. Settings

3.5 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)

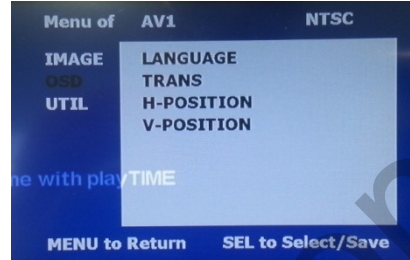
3. Settings

3.5 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. Unable to change mode

A. Check IR or ground cable connection

Check whether LED lamp is on, if not, check POWER cable connection.

Q. When black screen appears

A. Check whether 2nd LED is on. If not, double check whether AV cables are correctly connected

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. I cannot watch the rear camera on the screen

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

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 "P", 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