# BMW_CIC，AUDI2010 interface installation manual _v201002

4Pin round connector

This interface can insert video into BMW CIC screens(including BMW 5 series,3 series,7 series) and 2010 version Audi screens.(including Audi A6/A8, A4/A5). These screens use 4Pin round connector as the right side picture shows. This interface can insert RGB/2AV/1 reverse camera video or iPod video onto the screen, it has the following features.
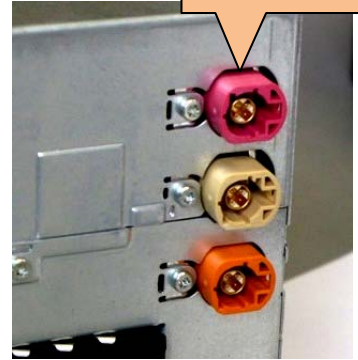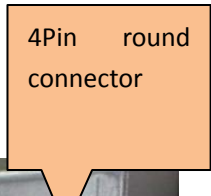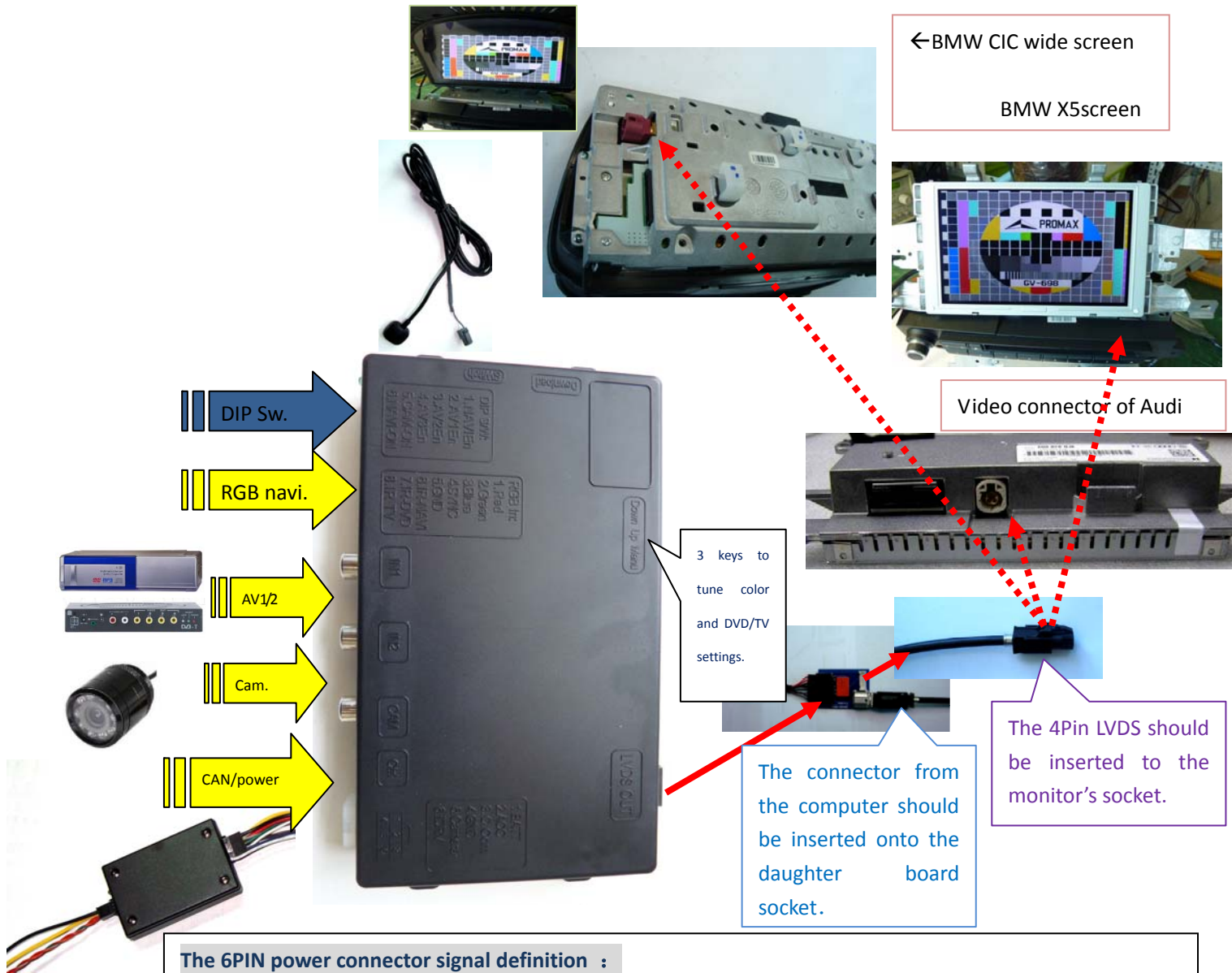
- ✓ This interface can be installed in 2010 version Audi cars，with DIP switch to select 800X480，or 400X240 resolution。[these 2 types of screen(2010 version) are using the 4Pin round connector,A6/A8 use 800X480 resolution，A4/A5/Q5 use 400X240 resolution.]
- ✓ The interface can be installed in BMW CIC screens，the screen can be set to be super wide screen or normal,（super wide is 24：9 screen in BMW 3,5,7 series with 1246X480 resolution），and a not so popular version X5（800X480 resolution, in some X5.）。
- ✓ When the BMW CAN box is used, the user can use the iDrv keys to control the DVD, TV tuner,iPod or added RGB navigation computer. The user may also set the display ratio to be 24:9 or 16:9 when on the super wide high resolution screen.
- ✓ Dedicated protection circuit is used inside the video connector, so even when the installer has a wrong connection on the video connector[even when connecting video pin to 12V], nothing will be damaged on the computer, display and interface.
- ✓ 1G Hz bandwidth video cable is used from the interface to the display, so stable and clean video is guaranteed and this interface has good compatibility on many screens.
- ✓ This interface pass the temperature check from -40~+85，And is eMark certified.

1. DIP Settings

DIP	Down side（=ON）	Up side（=OFF）
1	RGB input enabled	RGB input disabled
2,3	AV1/2 input enabled	AV1/2 input disabled
4	No function	
5	AV4 video is selected when green wire goes to 12V. [this is for the case aftermarket camera is installed]	Car computer video is selected when green wire goes to 12V. [this is for the case original camera is installed]

DIP 6 , 7, 8	6UP，7UP, 8UP： the screen is Audi A6/A8
	6UP，7UP, 8DOWN： the screen is Audi A4/A5/Q5
	6UP, 7DOWN, 8UP： the screen is BMW CIC super wide screen in 5，3，7series cars
	   [the resolution is 1264X480,in this mode, the user can use the option key on idrv to switch 24：9 and 16：9 display modes]
	6UP, 7DOWN, 8DOWN： the screen is BMW CIC X5[only a few such cars]。
	6DOWN：
	   This is independent working mode for specific HD headrest monitors, when connected to BMW/Audi screens, this DIP should be set UP.
	Note：
	Wrong DIP settings will not damage anything, if wrong image is found, just reset the DIP, it is not necessary to restart the interface.

1. System connection：

←BMW CIC wide screen

BMW X5screen

Video connector of Audi

DIP Sw.

RGB navi.

AV1/2

Cam.

CAN/power

3 keys to tune color and DVD/TV settings.

The connector from the computer should be inserted onto the daughter board socket．

The 4Pin LVDS should be inserted to the monitor's socket.

The 6PIN power connector signal definition ：

YELLOW：power supply of 12V，it can be ACC or BATT。

RED：ACC（=12V when key in ignition state）： when=12V，the interface works.

BLACK： Ground to Chassis。

GREEN： reverse video trigger signal [when =12V the reverse video is enabled]

WHITE：switch signal wire, when=12V, this interface switches。 [max.25V]

GRAY： CAN box's communication with interface on sharing control signal to DVD/TV on this wire.[if we do not need to idrv to control DVD/TV/iPOD, this wire may be cut off.]

Suggested installation process for BMW：

- FIRST   connect the 4 CAN bus wires to the car's CAN box [Do not connect the 6Pin to the interface at this moment],
- Then   CAN box's data LED will be blinking to show correct connection when the CIC computer is working,（CAN box has 2 LEDs, one is for power supply indication, the other is data-running.）
- Then   install the interface, pull the video plug from the monitor out and insert it onto the interface's daughter board, and insert the interface's plug into the monitor. and connect all installed video connectors.
- Then   connect the 6Pin power cable from CAN box to interface which makes the interface to work, the inserted

video may be seen on the monitor then, if the navi key on idrv is long-pressed.

- Finally, the installer may use the 3 side keys to tune the color, and with the OSD displayed on screen, the installer can change the color settings, and DVD, TV types. The "H loc" option is for tuning the picture horizontal location on screen.

When the interface is installed in Audi without original key controlling DVD/TV, [or people do not use the CAN box for BMW interface]:

please connect the YELLOW/RED wire together, and connect it to the ACC of the car, the Black wire should be connected to the Ground. In this case, the user needs to press the extra side key to switch the input.

2. CAN wires connection：

[Behind the BMW CIC screen, (including 3/5/7 series and X5）there is a flat connector, BATT,GND, and CAN wires are there. The 4 input wire of the CAN box should be connected there.

Name	BMW original wire color	CAN box wire color
CAN -	Twisted yellow[pin.6]	Twisted brown with orange
CAN +	Twisted black[pin.5]	Twisted brown with blue
GND	Brown/Black [Pin.3]	Black
BATT[13.8V]	Pink[Pin.1]	Yellow with Fuse
✧ [CAN wires when wrongly connected will not damage anything, but only when connected correctly, the data LED will blink and the interface switch correctly.]		
✧ CAN box generates ACC according to the CAN data action. it will sends ACC out and show the Power LED whenever the can bus is active with data running.		

For the Audi Cars：the CD's behind can offer many control signals, when the Can box's inputs are connected there, the user may press the "mode" key on the steering wheel to switch the input. The CAN box may also be connected to the rear of air condition controller, then the driver may also get speed,reverse and light signals from the can box.

| names	Audi Car's wire color	CAN box wire color
CAN -	Twisted orange with brown	Twisted orange with brown
CAN +	Twisted orange with blue	Twisted orange with blue
GND	Thick grey	Black
BATT[13.8V]	Thick red	Yellow with fuse

CAN DIP settings：

If the CAN box has no side DIP, it is fixed to BMW, if there is, it should be set in this way:

12DOWN,34UP = BMW;   13UP,24Down=Audi.

Video connector extra-tooth removal：

When the original plug is inserted into interface, or interface's plug is inserted into monitor's socket, there may be small extra-tooth conflict because of the car type deviation, in this case, please remove the extra small tooth, then the inserting process

will be very easy and smooth.
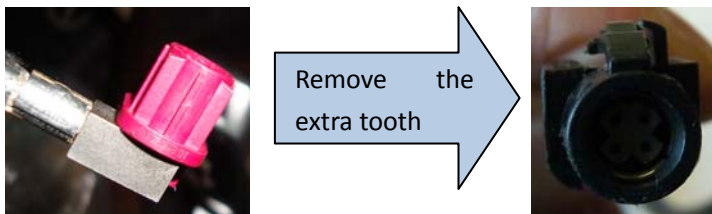
Remove the extra tooth

3. BMW user control：

➢ Press CD：   video image will go back to car CD，
➢ Press RADIO：video image will go back to car Radio，
➢ Press NAVI: Long press of 1 second or more will switch the interface from Carvideo→RGB→AV1→AV2→CAR. The user may also use the extra keypad to switch.
➢ Press Option（when in inserted video by interface）：
  ◆ If 8.8 super wide screen [for example 530，American or Chinese X5，X6]，then video display will be switched between [24：9] and [16：9]。
  ◆ When it is 6.5 screen[European X5]，this key has no function the display is fixed at [16：9]

Option key
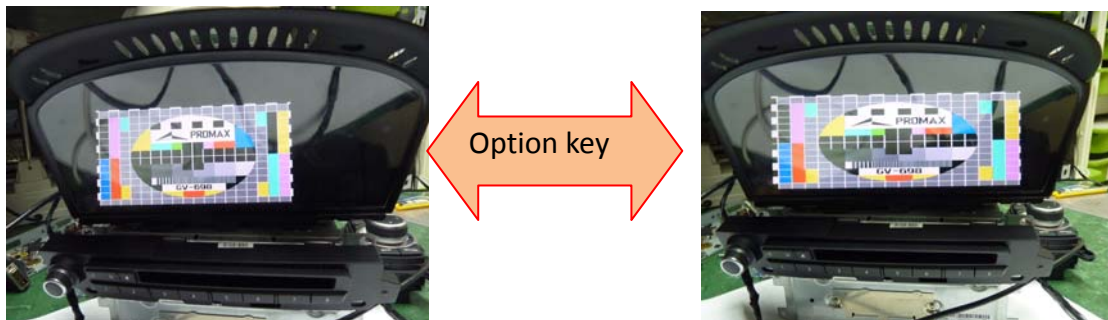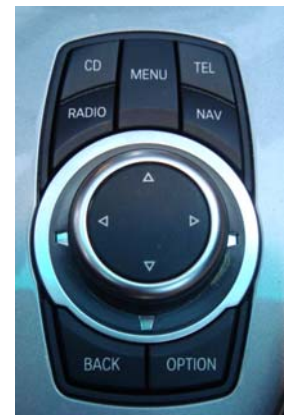
➢ UP,Down,left,Right arrow keys：
  ■ After market navigation maight be controlled in RGB input。
  ■ When in AV1，AV2,the user may control DVD,TV and iPOD with the iDrv knob with the pop up OSD text.

Cut the grey wire[inside 6Pin] off to remove this pop-up text,if not needed

➢ Automatic reverse image display：
    When on 09 version BMW-523，the connector to the reverse lamp has trigger signal on the yellow-with-white strip wire. This wire should be connected to the interface for automatic reverse video display.

● Audio insertion：
  ➢ If the user is installing just one player[DVD for example], he can insert the audio just to the AUX of Audi or BMW directly, it is not necessary to go through the interface.
  ➢ If the user are installing 2 AV resources, one DVD+one TV, then the interface may pull a mechanical relay to switch the audio. [the 2nd pin on the CTRL port's up row of the interface can pull a relay. When a relay is used, its + pin should be connected to BATT, the –Pin connected to this control pin,because it can sink 0.5Amax when =0V.]