

Audi A5/A4L/Q5 interface manual

This interface offers RGB, AV inserting onto A4/A5/Q5 panel in a plug-n-play way without cutting wire or using solders. It also offers these functions:

- super Stable, Clear and high-resolution RGB processing for Navigation map display.
- automatic camera switch.
- Optional adjustable reverse guideline display for helping reversing.
- Speed pulse, Reverse, Night lamp signals provided for the aftermarket navigation.

(1) Start the installation



As the picture shows, remove the big plastic part first[no screws, just hooks], then the monitor can be seen behind.

Remove the 4 screws that fixes the panel, then the monitor can be taken down, the interface can be installed behind the monitor or other locations.

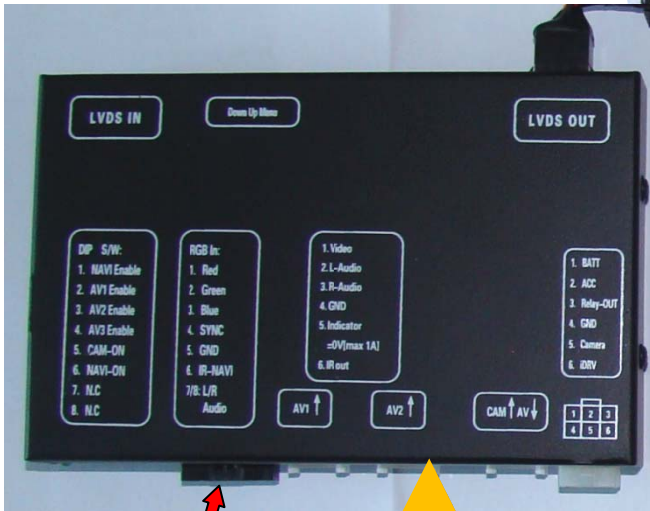


There is a 10P cable connecting the monitor and the CD, this cable is where the video is inserted.

(2) System Connections

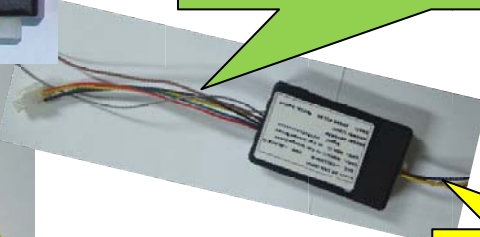


One 70cm LVDS cable to monitor.



6P signals generated by CAN box:

- YELLOW**: Constant 12V,
- BLACK**: GROUND,
- RED**: ACC (can generated),
- GREEN**: Reverse,
- WHITE**: Switch signal [When mode key pressed].
- GRAY**: other control[do not use]



- CAN Bus input:
- YELLOW**: Constant +12V
 - BLACK**: Ground
 - Orange/Blue**: CAN+
 - Orange/Brown**: CAN-

Note:

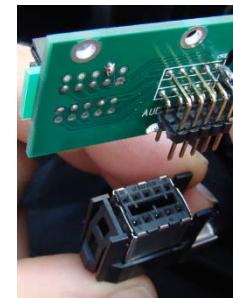
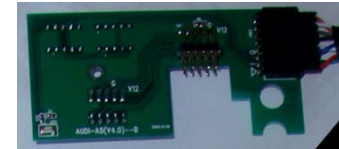
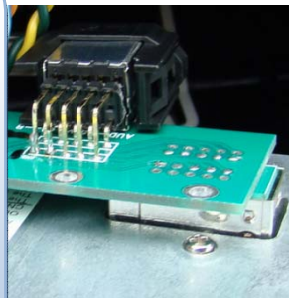
- ✧ this CAN box is suggested to connect to the rear of CD, then when the user press the MODE key on the steering wheel, the white wire goes to 5V, and the interface box switches.
- ✧ If the CAN box is connected to the rear of CD, the CAN box will not generate the reverse signal, speed pulse. [the CAR is not sending these signals to the CD's CAN]
- ✧ If the CAN box is connected to the rear of Air conditioner, reverse signal and speed pulses are generated, but the interface will not switch when the user press the mode key on the steering wheel.[The CAR is not sending the CAN package to the Air conditioner CAN.]

Daughter board connection behind the Monitor:

The original cable should be inserted onto the daughter board, and the daughter board gets fixed to the rear of the monitor in this way→

The screw should be replaced so that the daughter board stays fixed firmly.[the accessory package has 2 extra screws the same size as original but longer]

The original cable should also be fixed to the hook of the board.



(2) DIP switches and INPUT switches



DIP	1	2,3	4	5	6	7	8
Function	RGB	AV1/2	Empty	Green wire	Empty	Reverse	Empty
When =ON	Enable	Enable	dip	trigger to LVDS, otherwise to cam- AV	Dip	Guidelines display	Dip

There are 2 ways for the user to switch the inputs, Every input can be disabled/Enabled by DIP switch.:

- (1) Mode key on the steering wheel.
- (2) The user can press the red keypad to switch the input.



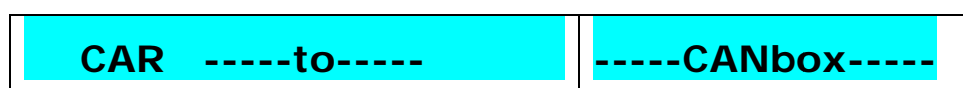
(3) 3 keys

There are three keys on the side of box, the user can press the keys to adjust these values:

Items	Functions
Brightness/Contrast/Color	The color tuning of each input
H Loc	The Horizontal location of picture.
CAM TOP L/R, Cam bottom L/R	The Camera guideline's Top Left/Right location, Bottom Left/Right location, these values can be tuned to suit the car body most according to the camera angle. The guideline can be disable by DIP7.

(4) CAN connection

The can box can be connected to the rear quadlock connector of the CD, or to the air conditional controller. Since the car is sending different data package by an internal router, the CAN box may generate different control signals.



Orange/blue=CAN+ High	-----	CAN+ High---Orange/Blue
Orange/Gray=CAN- Low	-----	CAN- Low---Orange/Gray
Big BROWN GND	-----	Big Black
BIG ReD BATT	-----	Big Yellow[2A FUSE]

(3) Parameters

Interface Box side:

- Video input : 0.7V ~1Vpp
- Sync input : TTL level [Negative polarity]
- BATT : 12V[Max.30V]
- Reverse[Green] : 12V [Internal Relay]
- Switch[White] : Valid at>3V. TTL valid. [max.35V]

CAN box side:

- CAN H/L : Audi level.
- Reverse output : =BATT[12V,max 0.2A] when in Reverse, otherwise 0V.
- ACC output : =BATT[12V,max out 0.5A]
 [This ACC is generated according to CAN activity, ACC=0V when CAN stops, so =12V 30 seconds more even car's key out.]
- Lamp : =BATT[12V] when car's evening lamps turns on,otherwise =0V. [max out 0.2A]
- Speed Pulse : +5V AC digital output[AC : Center=0V], ratio: 7 pulses/Second =1 KM/H.
- Switch[White wire]: =5V when user press "MODE" key on the steering wheel.