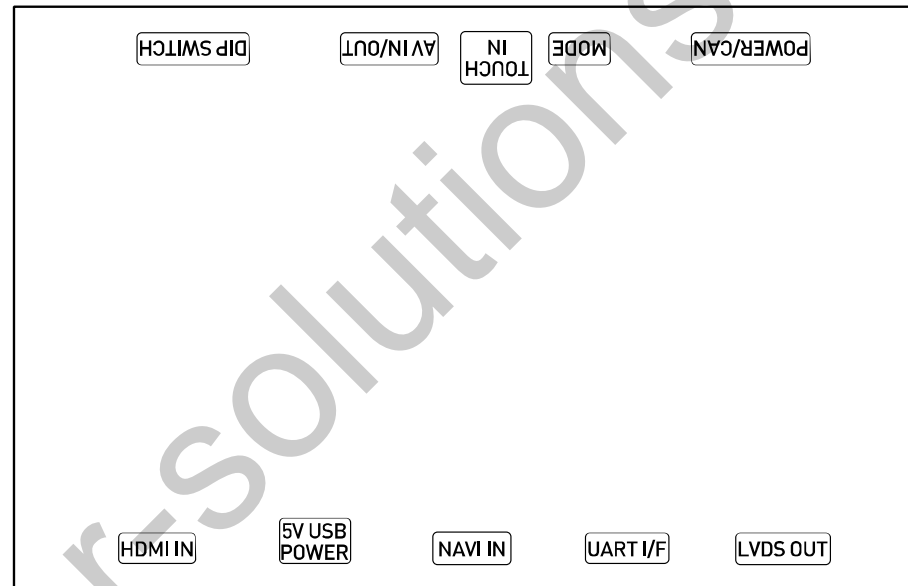


High-Definition Link for Audi

Manual



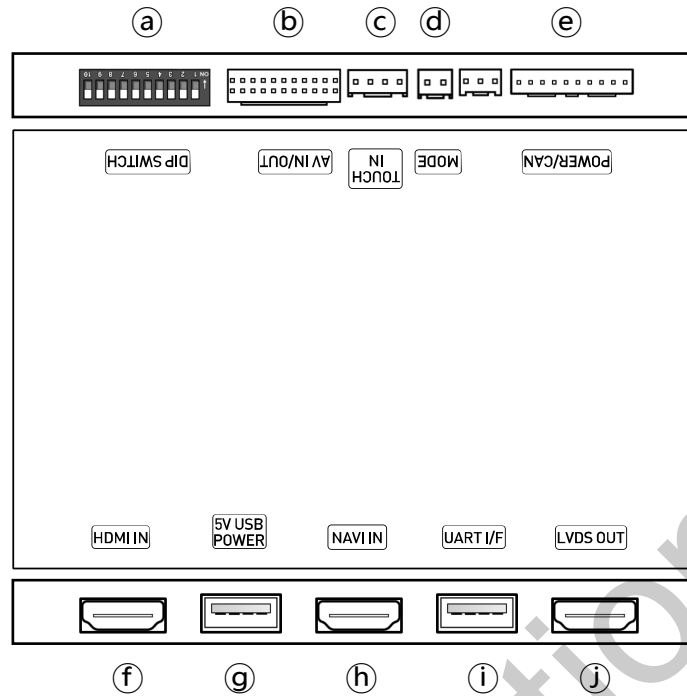
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Cautions

- You should check the names and colors of each wires exactly, before you connect the wires.
ex) CAN HIGH: White wires / CAN LOW: Blue wires
- The 'POWER / CAN Cable' should always be connected last and be disconnected first.
- The 'Mode Switch' is an optional part to change modes forcibly without CAN-BUS.
Generally, the CAN-BUS wires are connected for changing modes by original buttons.
- When the reverse gear is not detected by CAN-BUS,
the 'REVERSE 12V IN wire' should be spliced with 12V power of reverse light.
- **HDMI device-related**
 - HDMI mode accepts general-screen resolution of HDMI devices.
If screen size of HDMI does not fit on the monitor, should adjust screen size & position in 'settings mode'.
 - Generally, '5V 1A Power output(5V USB POWER)' is a standard voltage for charging smartphone.
If you need higher voltage than 5V, you should add a separate power supply.
- **Navigation(GPS) box-related**
 - When you connect the power wires(B+, ACC) to the navigation(GPS) box,
the 'ACC (12V) OUT' wire supported by device should be spliced with an ACC wire of navigation box.
 - After installation is done, select an applicable navigation(GPS) box model in the 'Navigation model selection menu' of setting mode.
 - The navigation box should be powered off before unplugging the HDMI cable.

Exterior



- Ⓐ DIP SWITCH
- Ⓑ AV IN / OUT
- Ⓒ TOUCH IN
- Ⓓ MODE
- Ⓔ POWER / CAN
- Ⓕ HDMI IN
- Ⓖ 5V USB POWER
- Ⓗ NAVI IN
- Ⓘ UART I/F
- Ⓙ LVDS OUT

Components



Power / CAN Cable



LVDS Cable



LVDS PCB



HDMI Cable



AV IN / OUT Cable



5-pin Micro USB Cable

Optional Parts(sold separately)



TTA 24-Pin to HDMI Gender
(For iNAVI CUBE)



Touch-IN Cable



Mode Switch



iNAVI CUBE LCD Cable



HDMI Cable
(Male to Male)

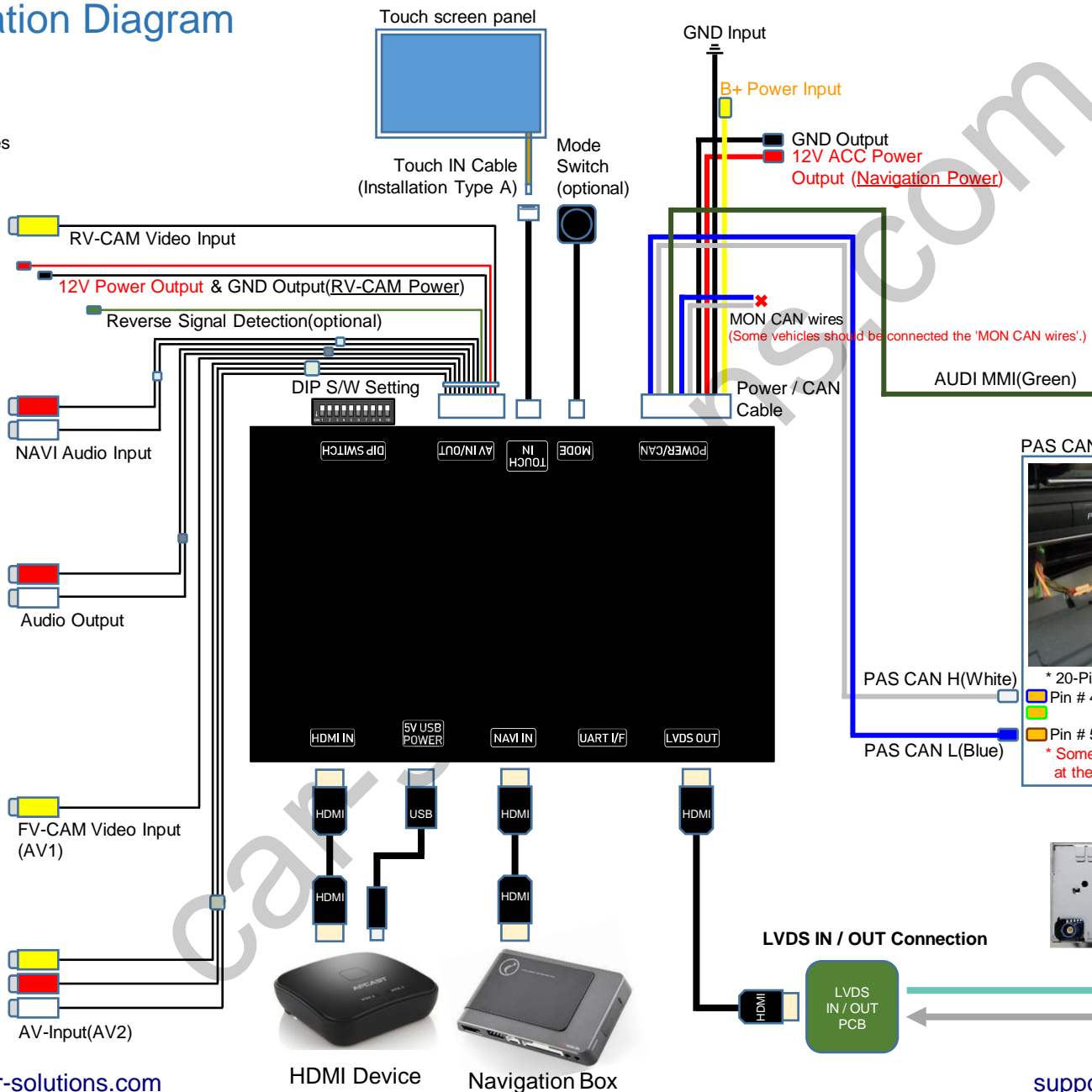


HDMI extender
(For stick type HDMI device)

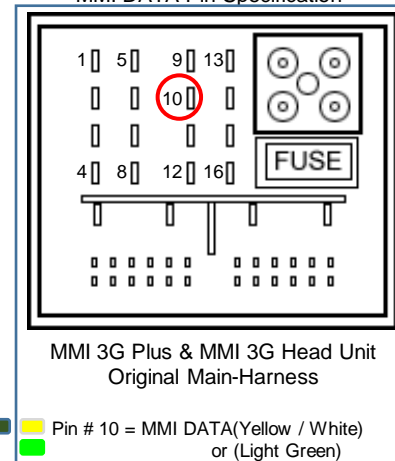
Optional Parts(purchased separately)

Full Installation Diagram

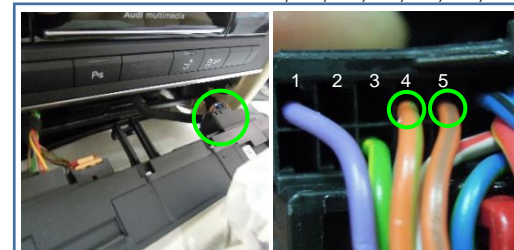
※ Optional External Devices



MMI DATA Pin Specification



PAS CAN HIGH & LOW <A4, A5, A6, A7, A8, Q5, Q7>



* 20-Pin Connector of Climate controller

Pin # 4 = CAN HIGH(Orange / Blue) or (Orange / Light Green)

Pin # 5 = CAN LOW(Orange / Brown)

* Some vehicles should be connected the CAN wires at the other place. (Please refer to next page.)

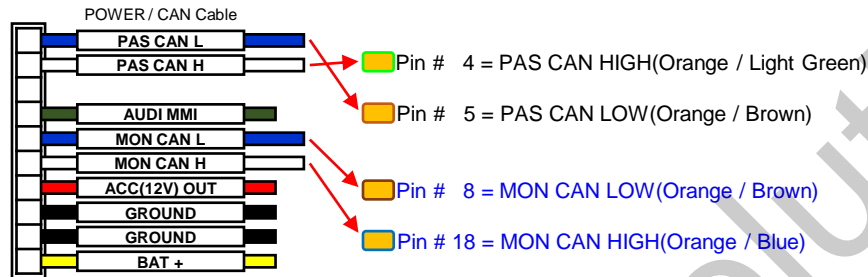
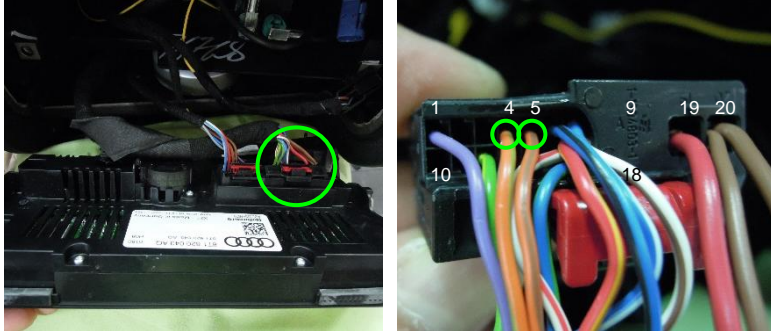
MMI 3G & 3G+ Head Unit(OEM)



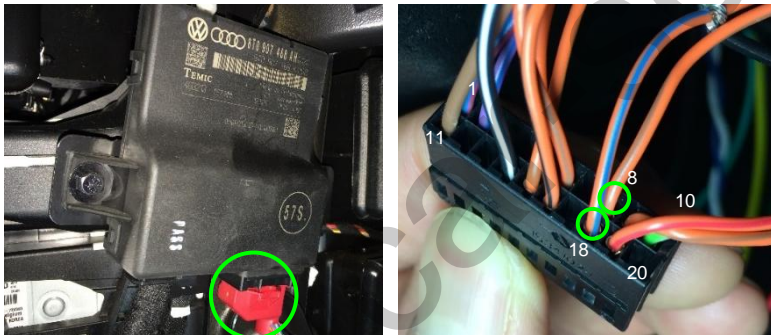
CAN wires information(exceptions)

< 2010, 2011 Audi A4 >

Climate Controller – 20-Pin Connector

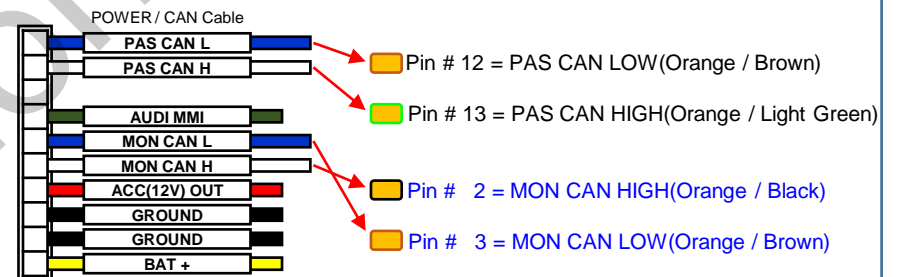
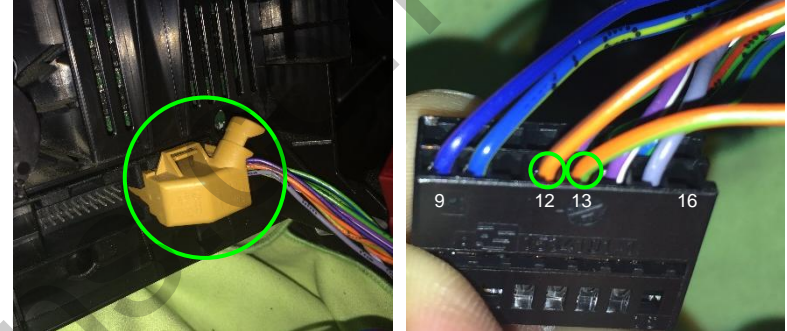


Gateway+BEM Module(on the left of the glovebox) – 20-Pin Connector

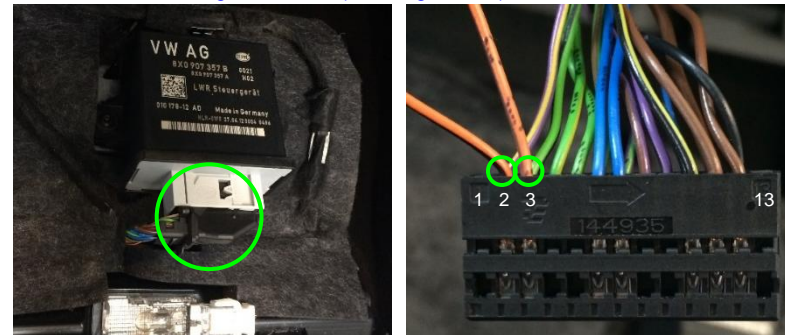


< 2012~ Audi Q3 >

Climate Controller – 16-pin Connector

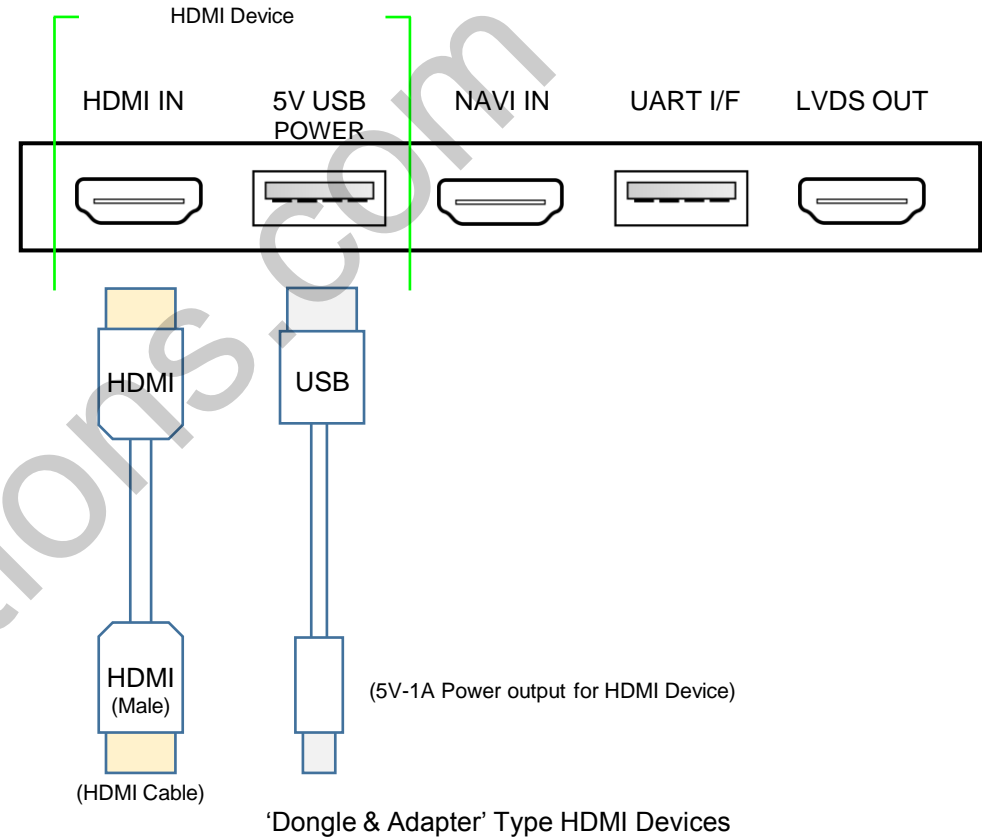
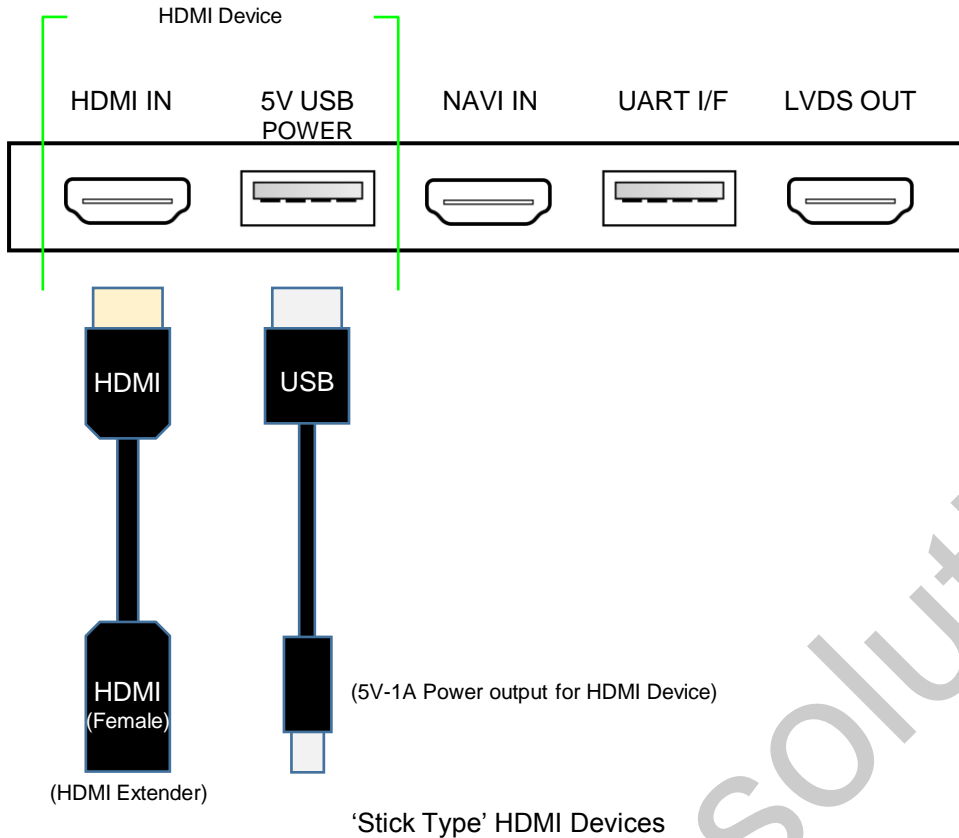


LWR Steuergerät Module(on the glovebox) – 26-Pin Connector

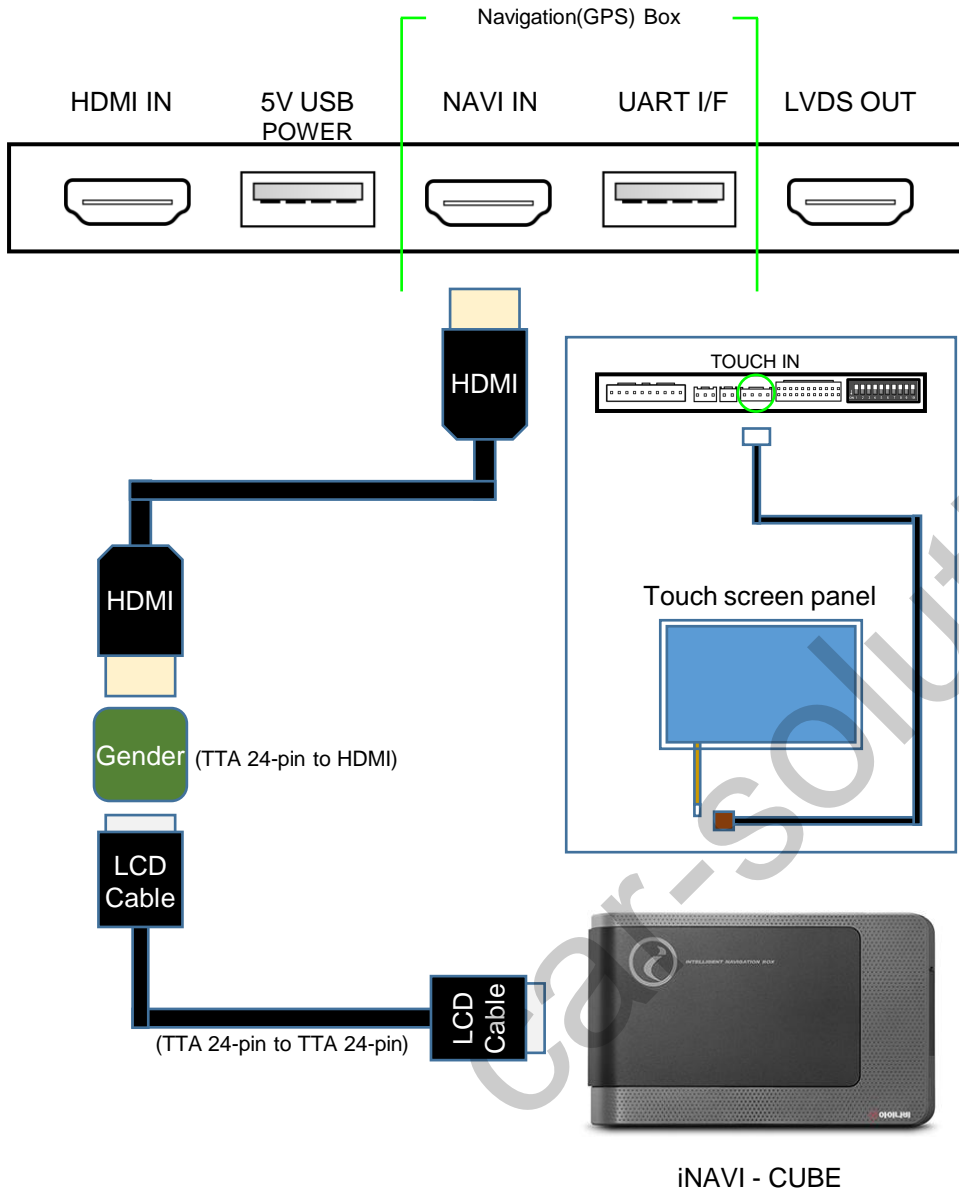


- Normally, general models of Audi should be just connected the 'PAS CAN High, Low wires' at the climate controller.
- But, some models have different CAN-BUS data. Please refer to above pictures and connect the CAN wires.

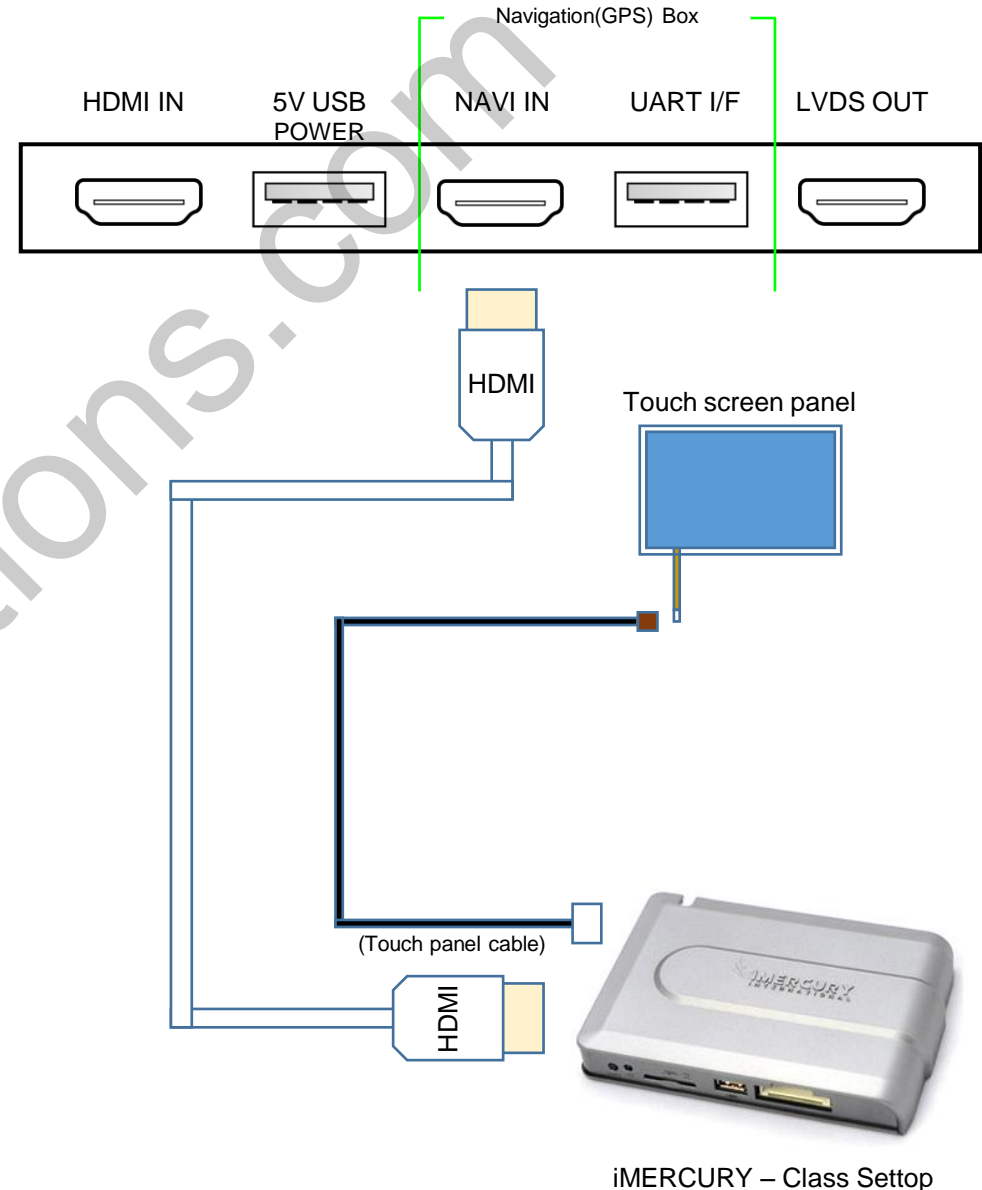
HDMI Connection Diagram












Navigation Connection Diagram(Type A)



Navigation Connection Diagram(Type B)

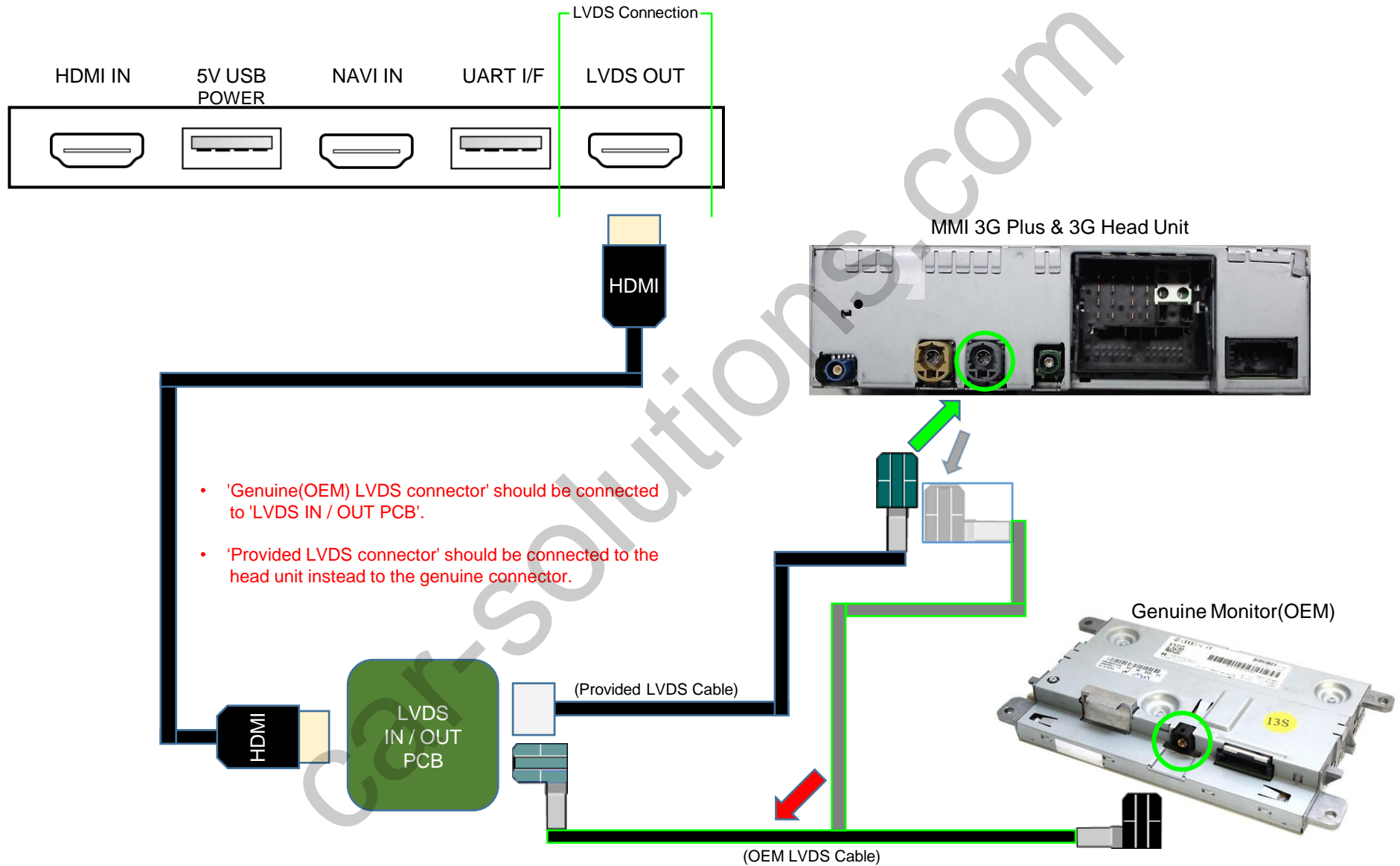


Compatibility Chart for Navigation(GPS) box models – Korea Market

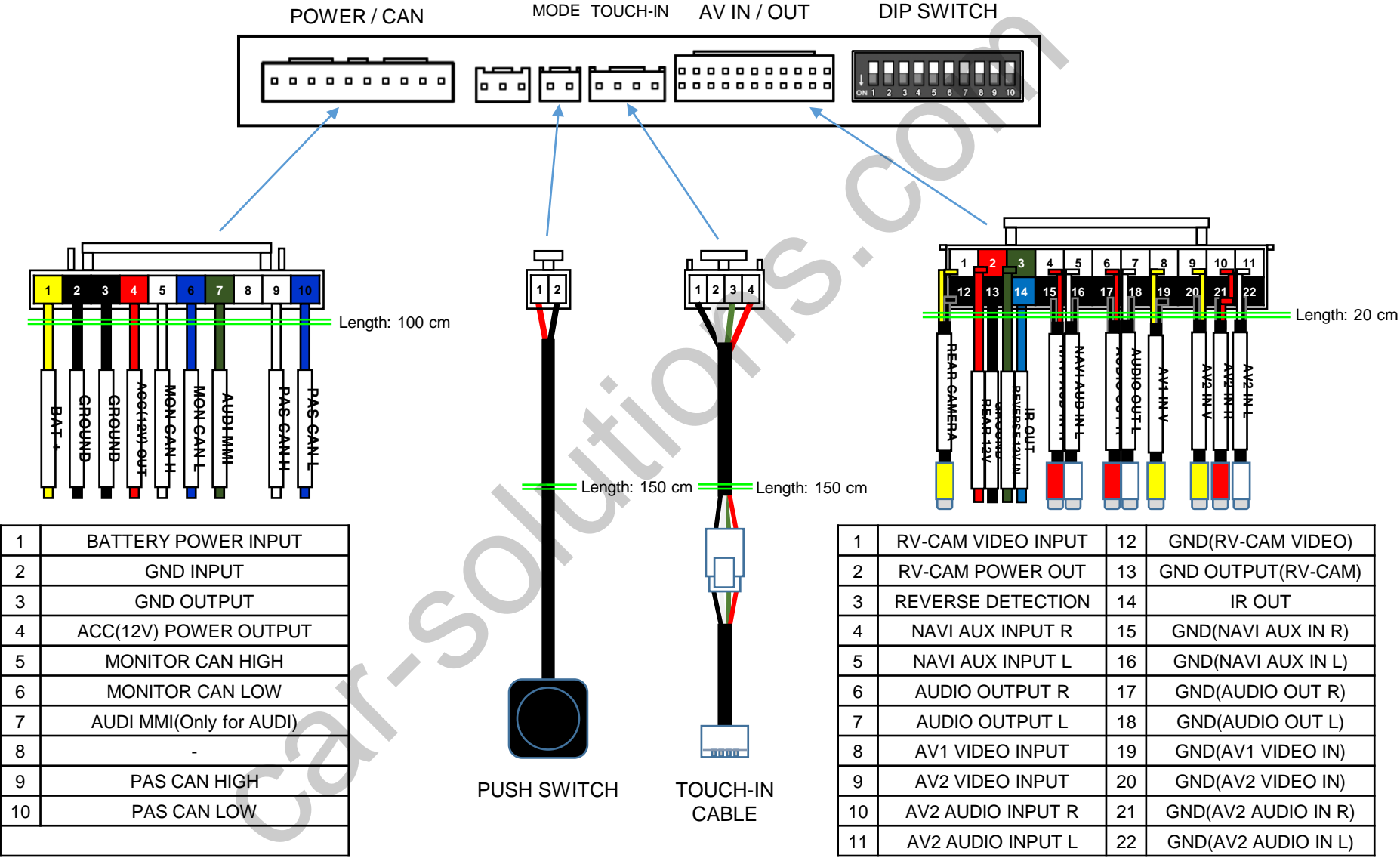
	Model	Country	Dip S/W (Navigation)	Required Parts				Installation Type
	CUBE(Light) - iNAVI	South Korea	 OFF(↑): 1, 2, 3, 4	 CUBE LCD Cable(iNAVI)	 Touch-IN Cable	 Gender (TTA 24-pin to HDMI)	 HDMI Cable (Male to Male)	Type A
	Class Settop - iMERCURY	South Korea	 ON(↓): 1, 2, 3 OFF(↑): 4, 5	 HDMI Cable (HDMI to HDMI)				Type B

- The device supports navigation(GPS) box models equipped with 'Digital video output'.
 - It does not support the 'RGB video'.
- www.car-solutions.com

LVDS Connection Diagram



Body Connector specifications



• The colors of each wires can be changed under manufacturer's circumstance.
www.car-solutions.com

Car Compatibility Chart

Car Models	Production Year	Specific Models
A4	2010 -	B8
A5	2009 -	8T
A6	2010 - 2011	C6(MMI 3G)
A6	2011 -	C7
A7	2010 -	4G
A8	2009 - 2010	D3(MMI 3G)
A8	2010 -	D4
Q3	2012 -	8U
Q5	2009 -	8R
Q7	2009 -	4L



The device is used in combination with Audi MMI(Multi Media Interface) system.

- MMI navigation (3G)
- MMI navigation plus (3G)
- MMI navigation plus (3G Plus)



The device supports the Audi original screen equipped with '4 pin LVDS round connector' only.

Please check the specification of original LVDS connector on the sidelines of a production year.

Activation by original buttons of Audi



MMI 3G Plus Controller



MMI 3G Controller

For MMI 3G Plus & MMI 3G



Steering wheel buttons – NEW



Steering wheel buttons – OLD

Button	Function	Operation	Remarks
1 NAV	Changing Modes	Press the button short.	Order: HDMI → NAVI → AV2 → OEM
1 NAV	System Locking / Unlocking	Press the button 10 seconds long.	If you visit car service center, you can lock the all functions of the device. It is only possible to use the OEM functions under it is locked.
2 i NAV (MODE)	Changing mode to Front View Camera mode(AV1)	Press the button 2 seconds long.	It changes the screen from any modes to AV1 mode directly.
3 BACK (RETURN)	Reset to factory default setting and power.	Press the button 5 seconds long.	You can use this function when you get in trouble to see the screen while setting the screen.
Other Buttons	Back to OEM	Press the button short.	Return to the OEM mode in any modes.

DIP Switch Settings



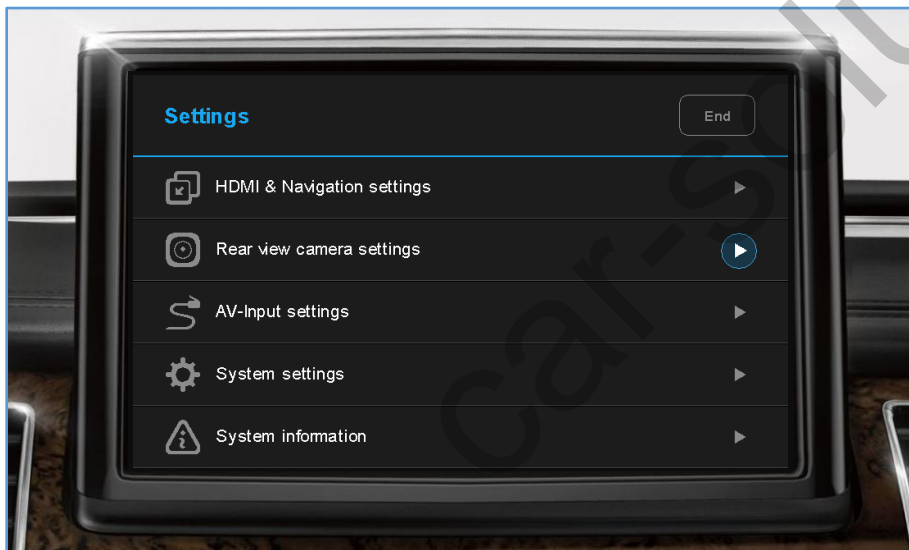
Pin No.	ON(▼)	OFF(▲)	No.6	No.7	No.8	No.9	No.10	Car Models	CAN wires Information
1	HDMI Mode	Skip HDMI Mode	OFF(▲)	OFF(▲)	OFF(▲)	OFF(▲)	OFF(▲)	A6, A7 / 2012~ (8-inch / 800*480)	PAS CAN = Climate controller
2	Navigation Mode	Skip Navigation Mode	OFF(▲)	OFF(▲)	OFF(▲)	OFF(▲)	ON(▼)	A4 / 2010, 2011 (7-inch / 800*480)	PAS CAN = Climate controller MON CAN = Gateway+BEM
3	External Rear View Camera	Original Rear View Camera	OFF(▲)	OFF(▲)	OFF(▲)	ON(▼)	OFF(▲)	A4, A5 / 2013~ (7-inch / 800*480)	PAS CAN = Climate controller
4	External Front View Camera(AV1 Mode)	Skip External Front View Camera(AV1 Mode)	OFF(▲)	OFF(▲)	OFF(▲)	ON(▼)	ON(▼)	Q3 / 2012~ (7-inch / 800*480)	PAS CAN = Climate controller MON CAN = LWR Steuergerät
5	AV2 Mode	Skip AV2 Mode							
6	Selection of car model								
7									
8									
9									
10									

Settings

For MMI 3G Plus & MMI 3G



Button		Function	Operation
1	MENU(SETUP)	Enter into the setting menu	Press the button 5 seconds long.
2	BACK(RETURN)	Back to previous menu	Press the button short.
3	Selection	Select the menu and setting values.	Press the button short.
4	Turn the dial clockwise	Move the menu-pointer and adjust the setting values.	Move the pointer and setting values to up(↑) and right(→).
5	Turn the dial counterclockwise	Move the menu-pointer and adjust the setting values.	Move the pointer and setting values to down(↓) and left(←).

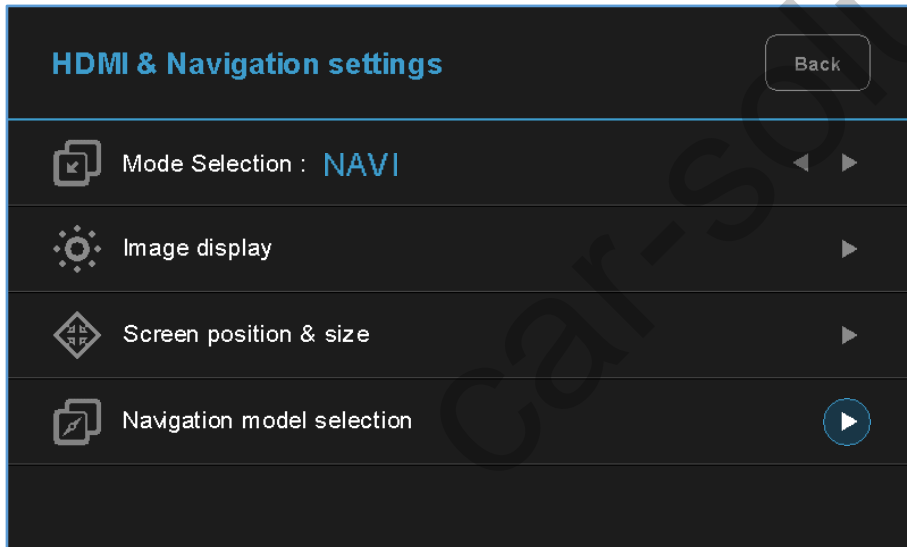
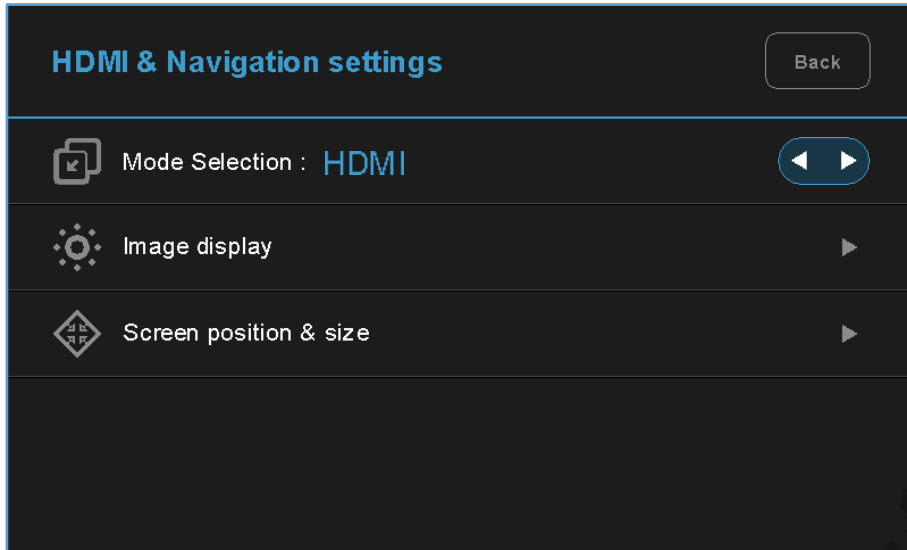


1. Enter into the setting menu.

<Press the 'MENU(SETUP)' button 5 seconds long.>

- HDMI & Navigation settings
- Rear view camera settings
- AV-input settings
- System settings
- System information

Settings



2. HDMI mode settings

- Mode selection: HDMI ↔ NAVI
- Image display
= Adjust the values of brightness and contrast
Red-Green-Blue colors of HDMI display.
- Screen position & size
= Adjust position and size of HDMI display.

3. NAVI mode settings

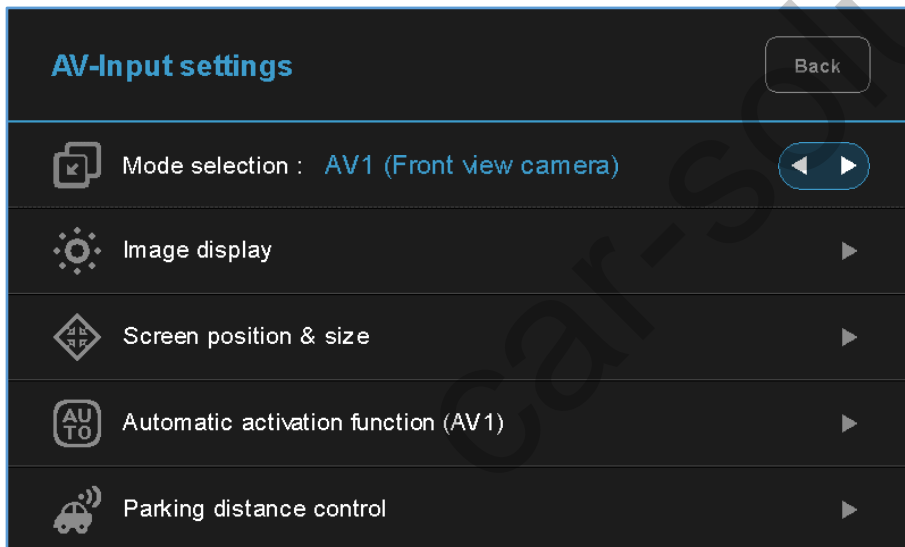
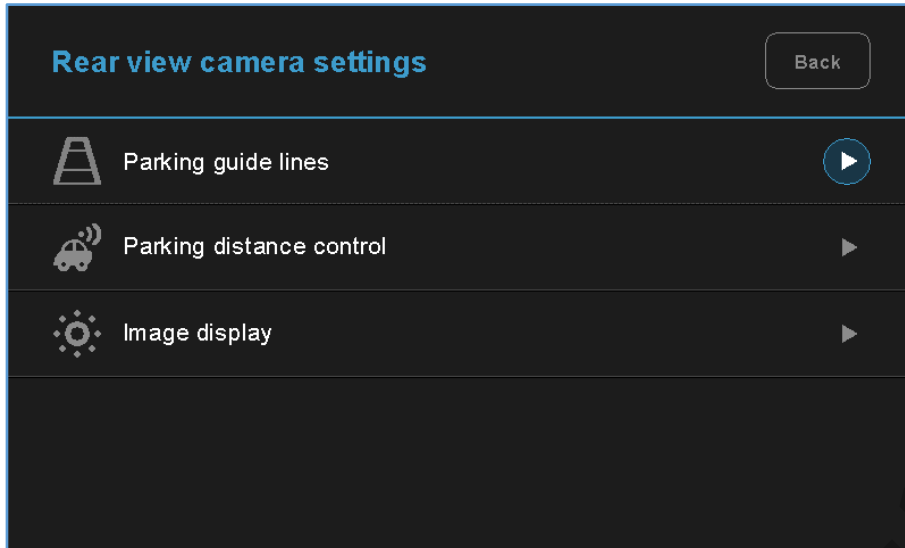
- Mode selection: NAVI ↔ HDMI
- Image display
= Adjust the values of brightness and contrast
Red-Green-Blue colors of NAVI display.
- Screen position & size
= Adjust position and size of NAVI display.
- Navigation model selection
 - ① Default ② iNAVI – CUBE ③ imercury – Class setup

④

⑤

⑥

Settings



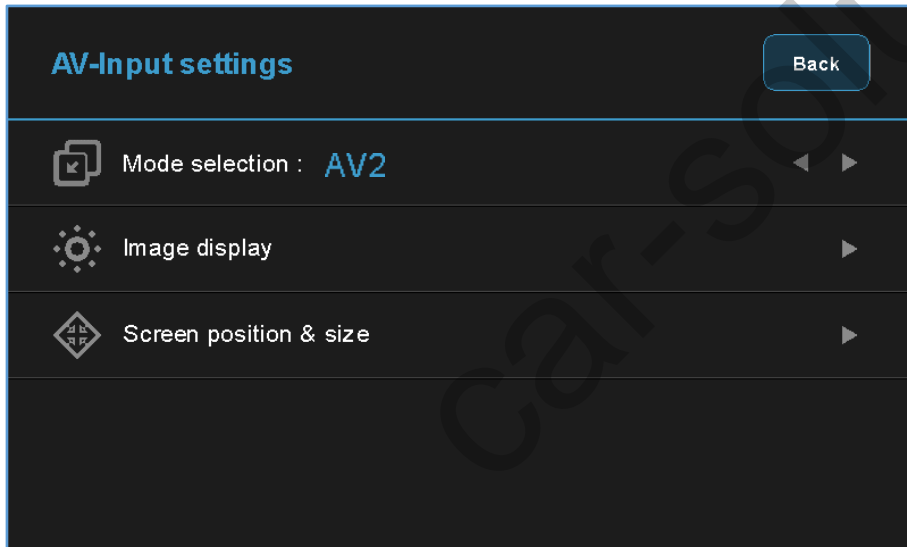
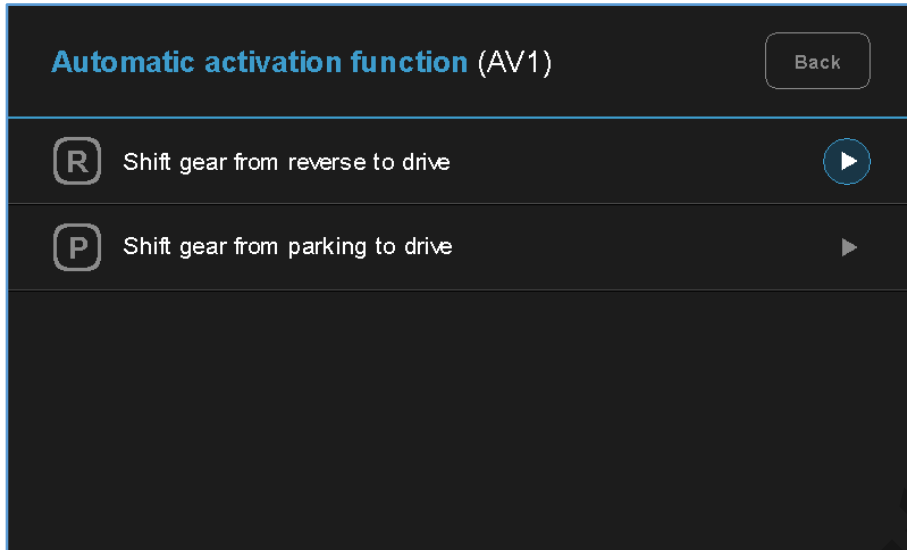
4. Rear view camera settings

- **Parking guide lines**
= Adjust position of parking guide lines and select the lines 'ON or OFF'.
- **Parking distance control**
= Adjust position of parking distance control sensors to 'LEFT or RIGHT' and select the PDC 'ON or OFF'.
- **Image display**
= Adjust the values of brightness and contrast Red-Green-Blue colors of Rear view camera display.

5. AV1(Front view camera) settings

- **Mode selection: AV1(Front view camera) ↔ AV2**
- **Image display**
= Adjust the values of brightness and contrast Red-Green-Blue colors of AV1(Front view camera) display.
- **Screen position & size**
= Adjust the position and size of AV1 display.
- **Automatic activation function(AV1)**
= * Please refer to next page.
- **Parking distance control**
= Adjust the position of parking distance control sensors to 'LEFT or RIGHT' and select the PDC 'ON or OFF'.

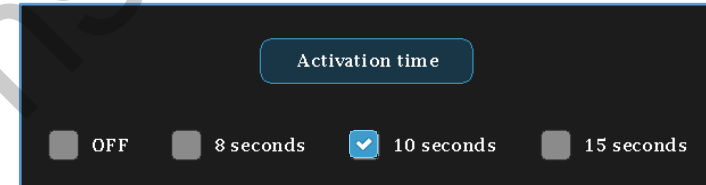
Settings



6. Automatic activation function(AV1)

- Shift gear from reverse to drive
- Shift gear from parking to drive

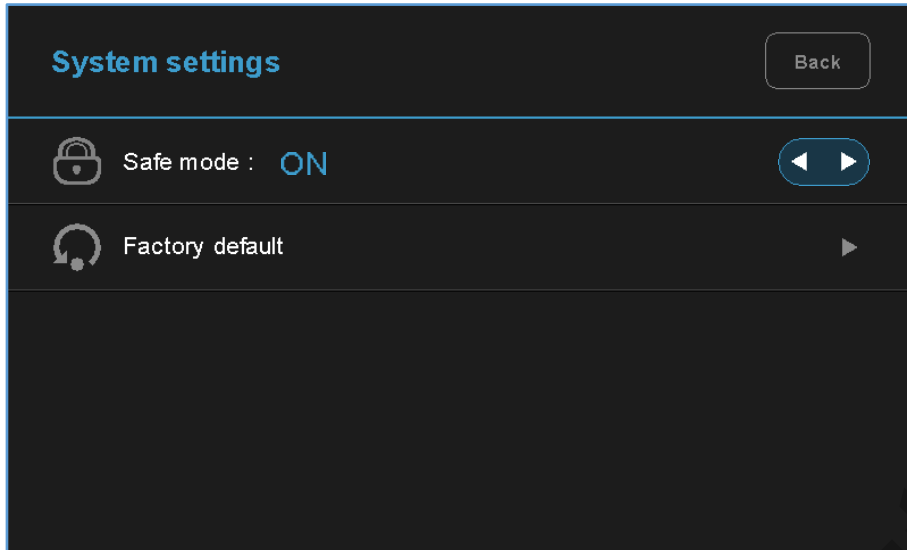
* When you shift gear 'from reverse to drive' or 'from parking to drive', it just works automatically during the activation time you selected.



7. AV2 settings

- Mode selection: AV2 ↔ AV1(Front view camera)
- Image display
= Adjust the values of brightness and contrast
Red-Green-Blue colors of AV2 display.
- Screen position & size
= Adjust the position and size of AV2 display.

Settings

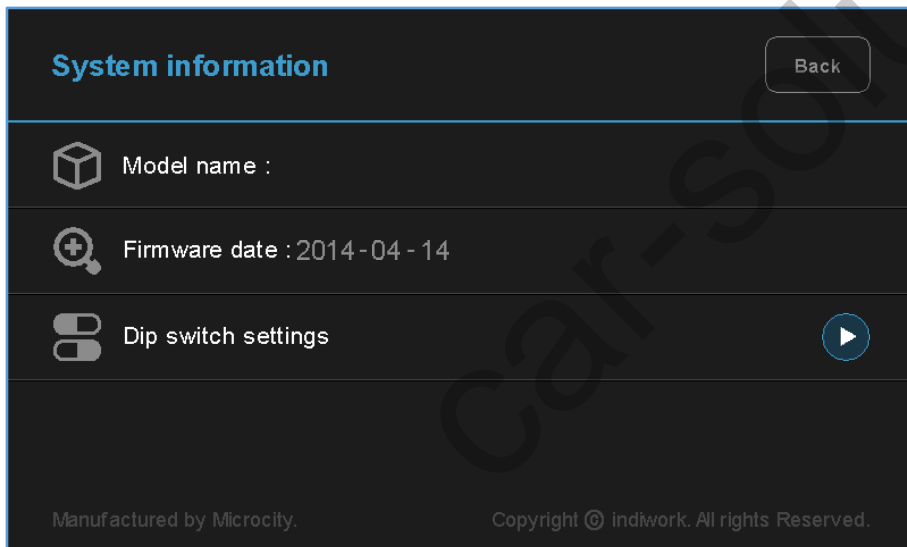


8. System settings

- Safe mode
= Select the one of two between 'ON and OFF'.

* If you select 'ON', 3 modes(HDMI, NAVI and AV2) will be faded out when the car is driven.

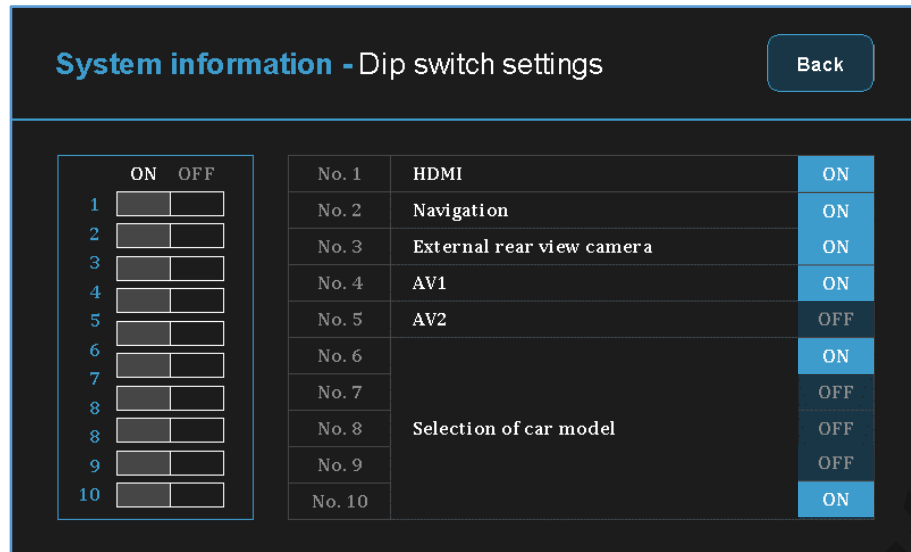
- Factory default
= Reset all setting values to factory default setting.



9. System information

- Firmware date: 2014 - 04 - 14(The latest firmware date)
- = You can check the current firmware version date.
- Dip switch settings
= You can check the current positions of dip switch settings.

Settings



10. Information of Dip switch settings

* You can check the current positions of dip switch settings.

ex 1)
Actual DIP switch values. (→)



Appears on the setting menu. (↓)

No. 1	HDMI	ON
No. 2	Navigation	OFF
No. 3	External rear view camera	ON
No. 4	AV1	ON
No. 5	AV2	OFF
No. 6	Selection of car model	OFF
No. 7		ON
No. 8		OFF
No. 9		ON
No. 10		OFF

ex 2)
Actual DIP switch values. (→)



Appears on the setting menu. (↓)

No. 1	HDMI	ON
No. 2	Navigation	ON
No. 3	External rear view camera	OFF
No. 4	AV1	ON
No. 5	AV2	OFF
No. 6	Selection of car model	ON
No. 7		OFF
No. 8		OFF
No. 9		OFF
No. 10		OFF