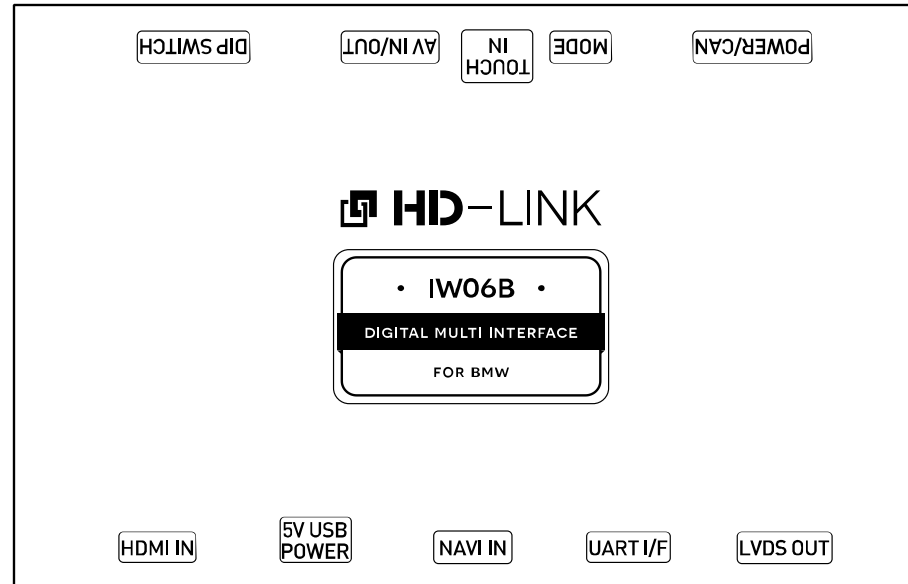


Instruction Manual

High-Definition Link for BMW



Model Name	CF-V-AX-HDMI-BMW
Latest Firmware Date	2014 - 05 - 30
Manual Version	Rev. 2.0
Language	English

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Cautions

▪ IW06B-related

- 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.

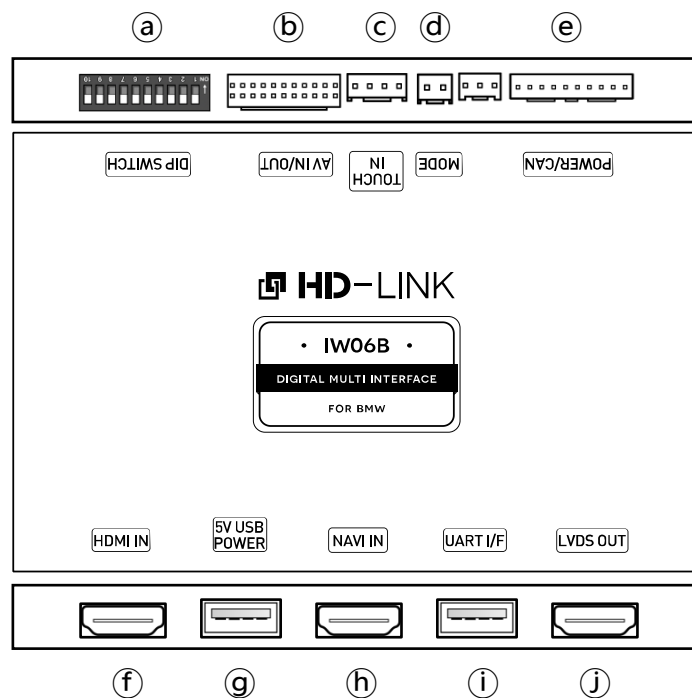
▪ Navigation(GPS) box-related

- When you connect the power wires(B+, ACC) to the navigation(GPS) box, the 'ACC (12V) OUT' wire supported by IW04M 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.

Dimension



Exterior



- (a) DIP SWITCH
- (b) AV IN / OUT
- (c) TOUCH IN
- (d) MODE
- (e) POWER / CAN
- (f) HDMI IN
- (g) 5V USB POWER
- (h) NAVI IN
- (i) UART I/F
- (j) LVDS OUT

Components



Power / CAN Cable



LVDS Cable



LVDS PCB



HDMI Cable
(For LVDS)



AV IN / OUT Cable



5-pin Micro USB Cable

Optional Parts (sold separately at the indiwork)



Mode Switch



HDMI Cable
(Male to Male)



HDMI extender
(For stick type HDMI device)

Full Installation Diagram

※ Optional External Devices

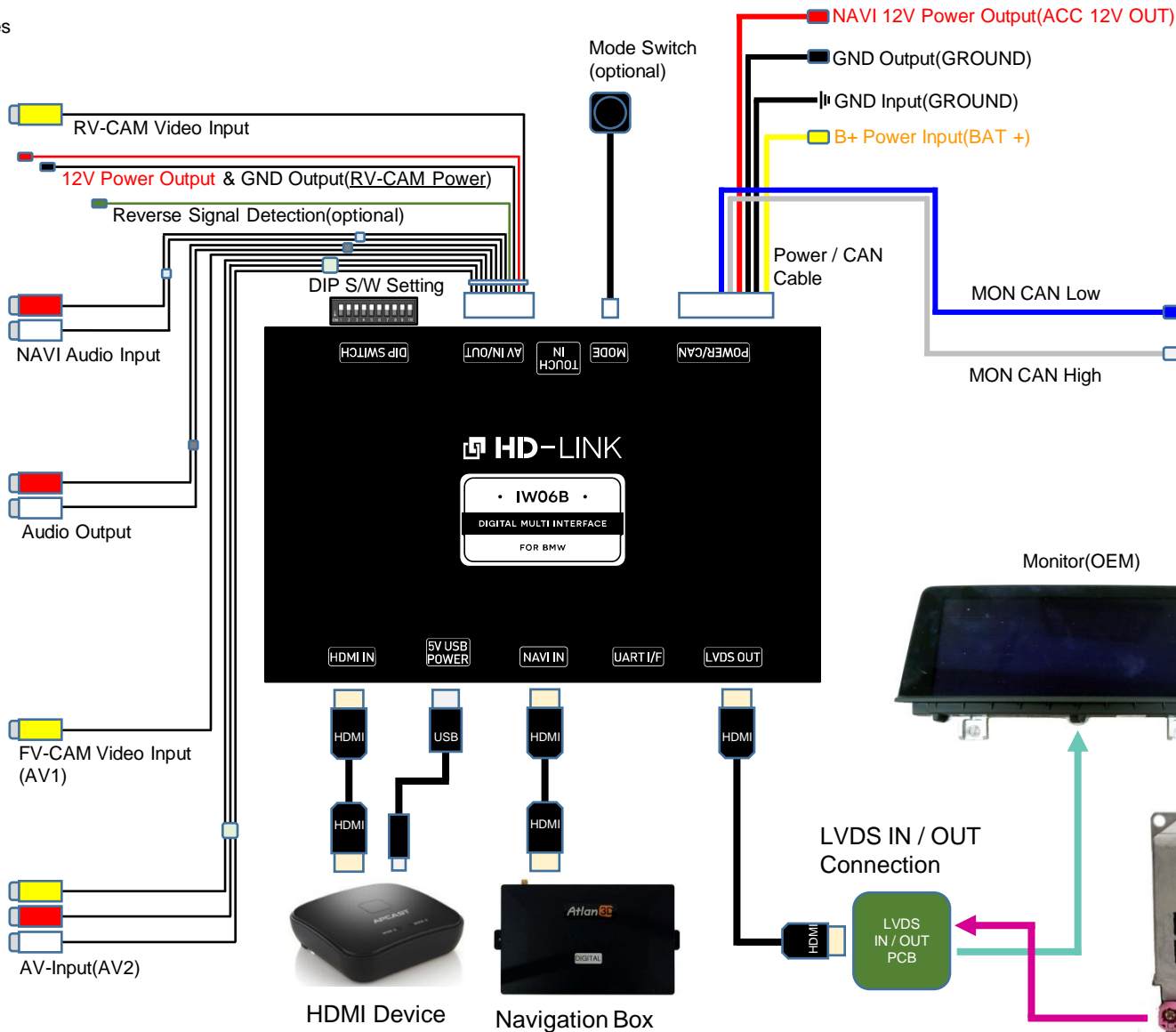
External Rear View Camera

Audio(AUX) Output of Navigation Box

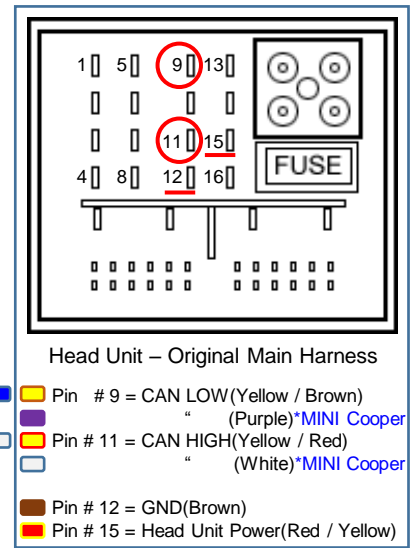
Auxiliary(AUX) Input of the car

External Front View Camera

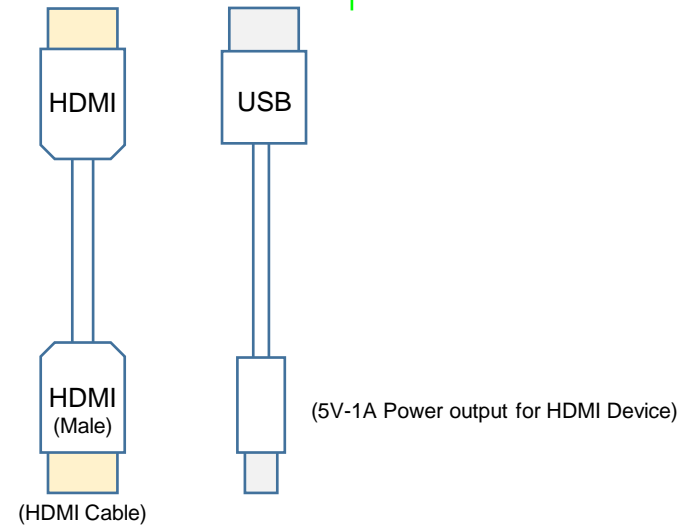
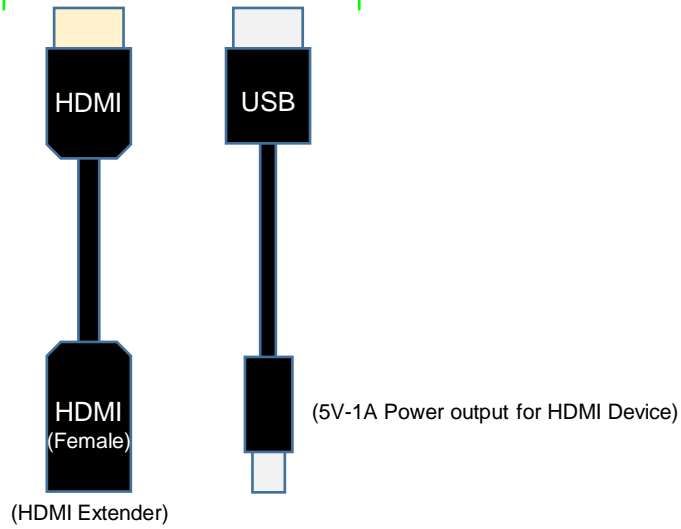
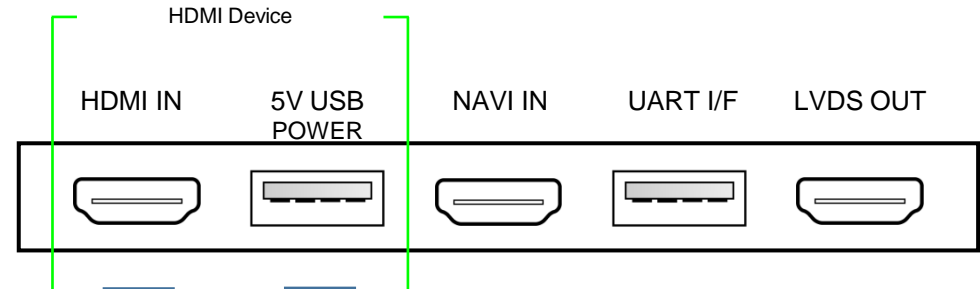
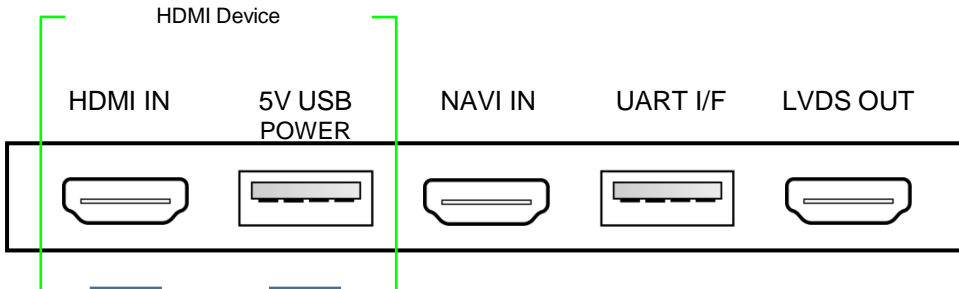
AV device (ex: DTV Box, Divx)



※ CAN HIGH / LOW Pin Specification



HDMI Connection Diagram

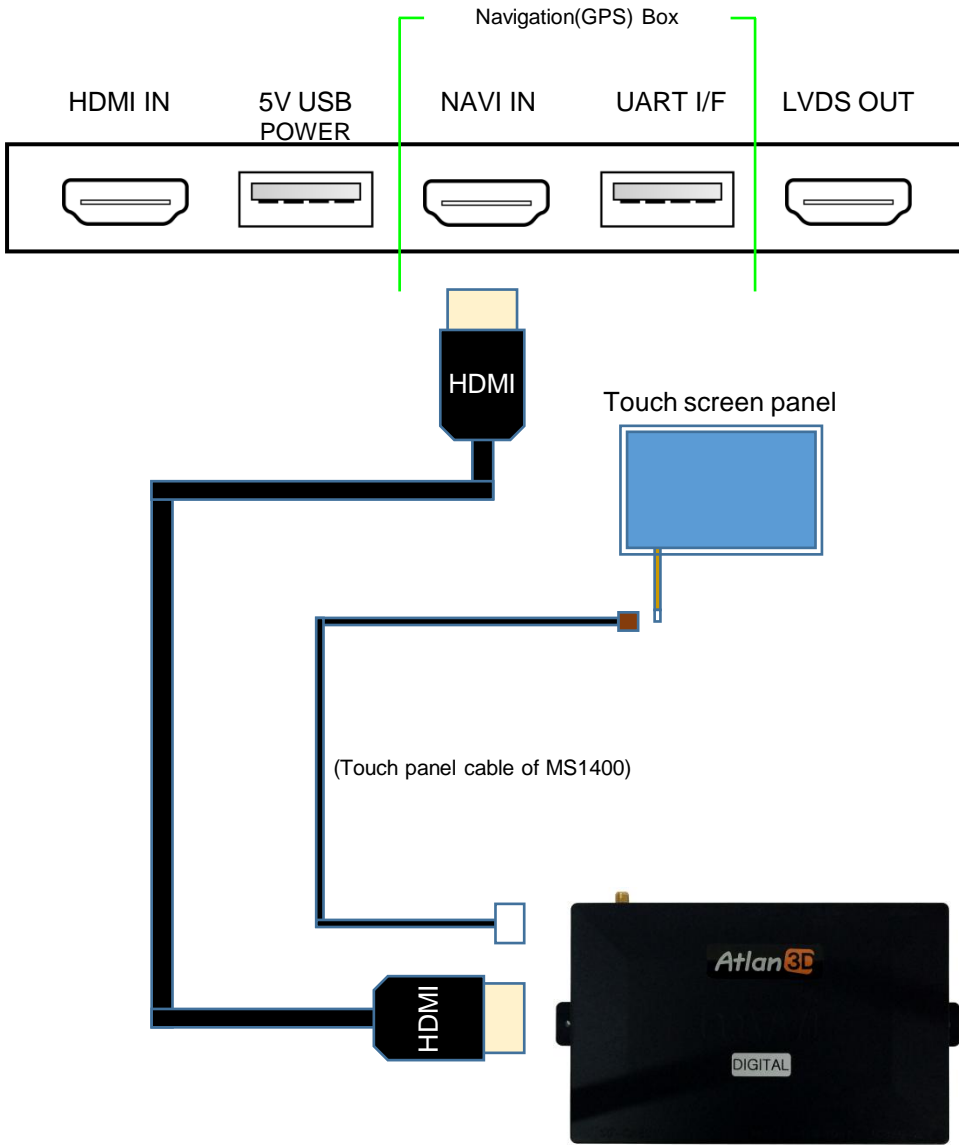


'Stick Type' HDMI Devices

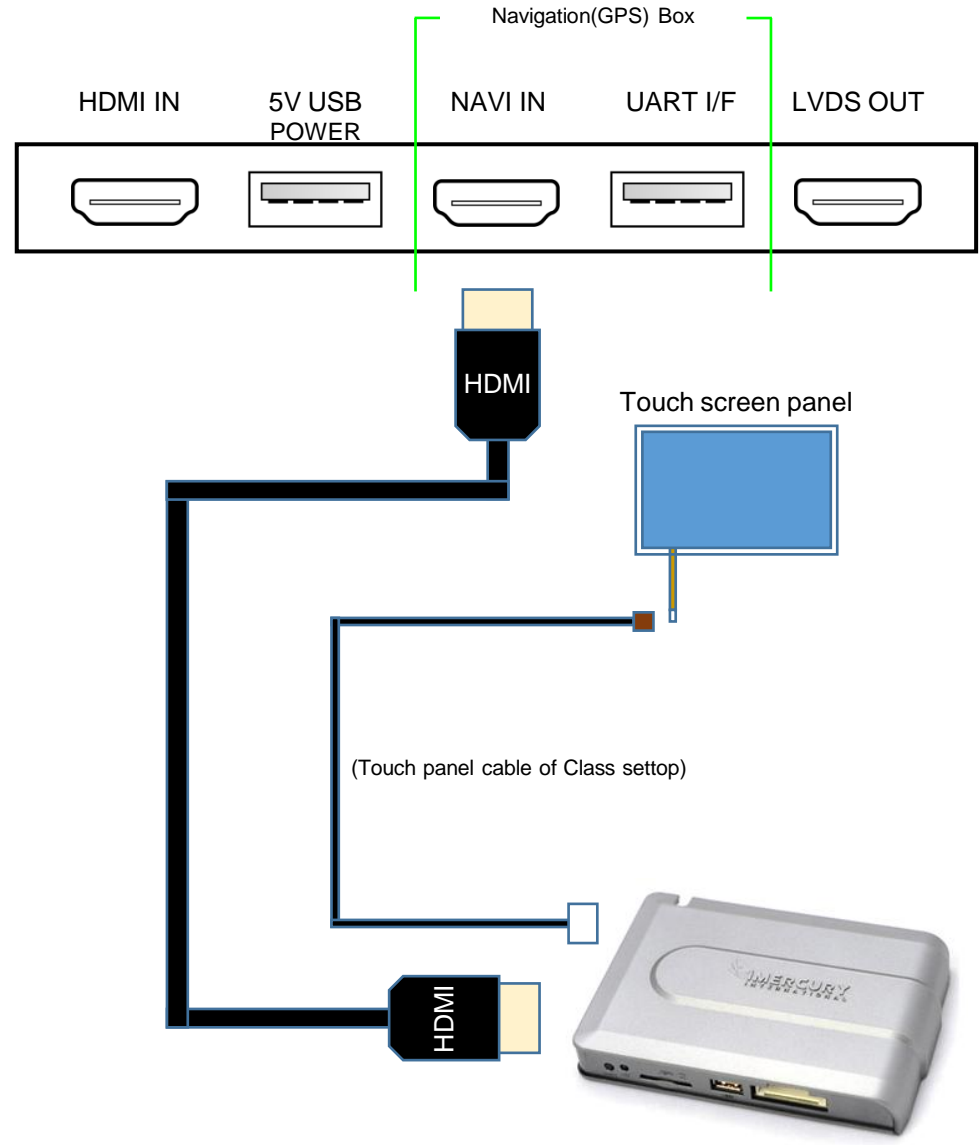
'Dongle & Adapter' Type HDMI Devices



Navigation Connection Diagram









MYVI - MS1400 Digital



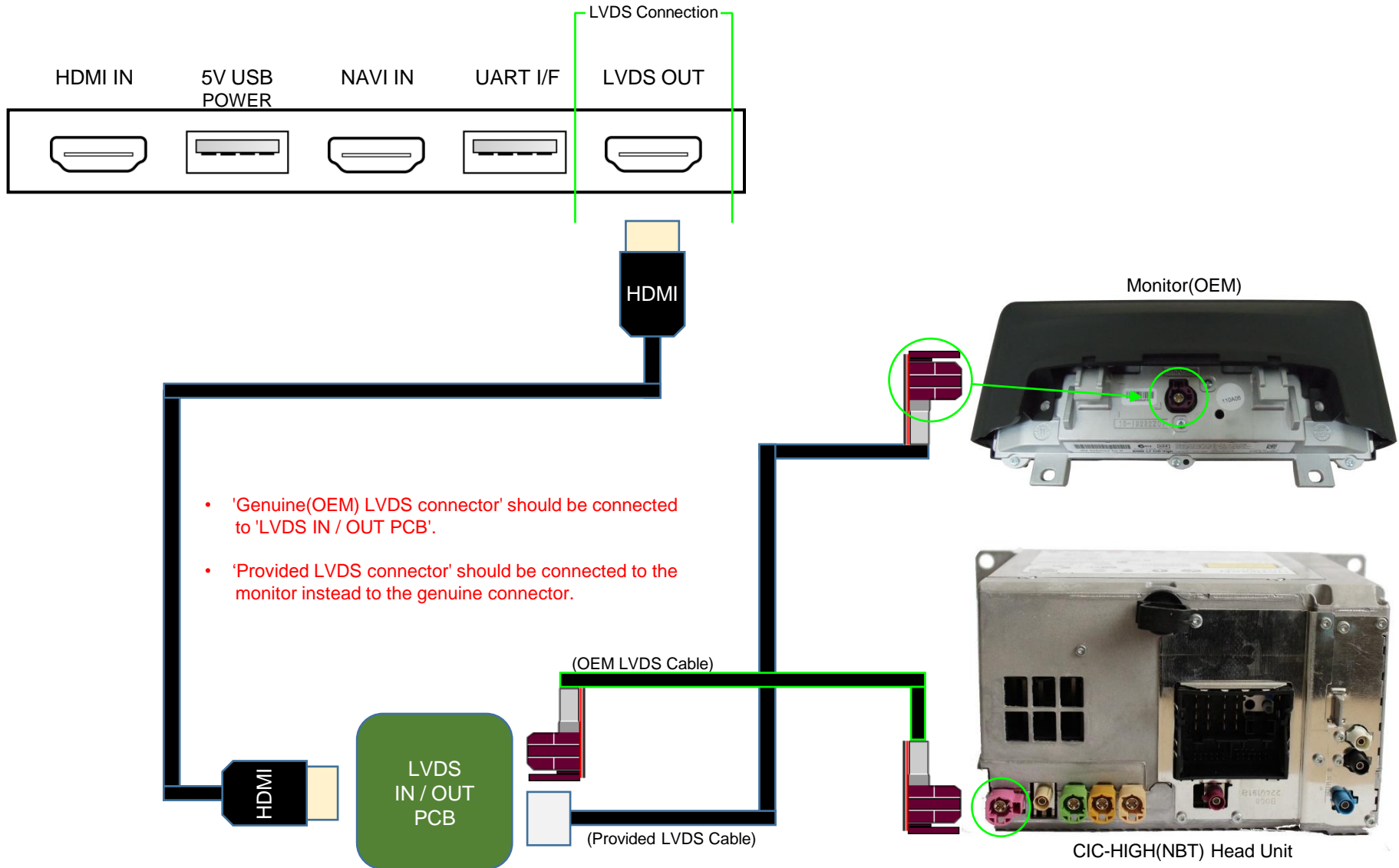
iMERCURY - Class Settop

Compatibility Chart for Navigation(GPS) box models

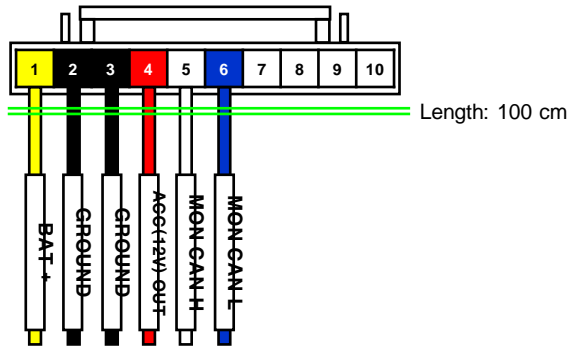
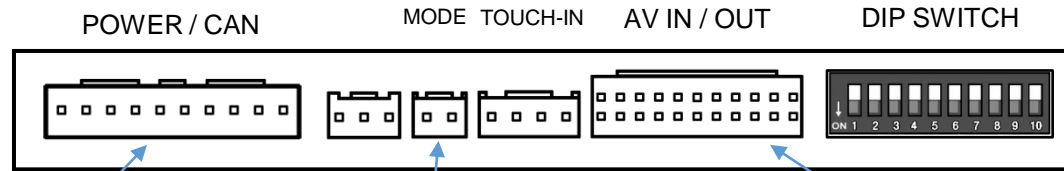
	Model	Country	Dip S/W (Navigation)	Required Parts	Remarks
	MYVI MS1400 Digital	South Korea	 OFF(↓): 1, 2, 3 ON(↑) : 4	 HDMI Cable (HDMI to HDMI)	
	iMERCURY Class Settop	South Korea	 ON(↓): 1, 2, 3 OFF(↑): 4, 5	 HDMI Cable (HDMI to HDMI)	

- The 'IW06B(HD-Link)' supports navigation(GPS) box models equipped with 'Digital video output'.
- It does not support the 'RGB video'.

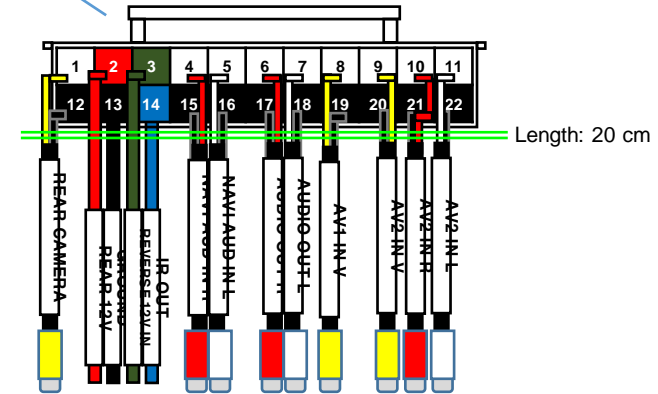
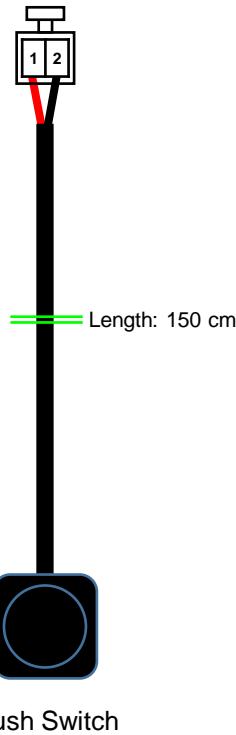
LVDS Connection Diagram



Body Connector specifications



1	BATTERY POWER INPUT
2	GND INPUT
3	GND OUTPUT
4	ACC(12V) POWER OUTPUT
5	MONITOR CAN HIGH
6	MONITOR CAN LOW
7	
8	
9	
10	



1	RV-CAM VIDEO INPUT	12	GND(RV-CAM VIDEO)
2	RV-CAM POWER OUT	13	GND OUTPUT(RV-CAM)
3	REVERSE DETECTION	14	IR OUT
4	NAVI AUX INPUT R	15	GND(NAVI AUX IN R)
5	NAVI AUX INPUT L	16	GND(NAVI AUX IN L)
6	AUDIO OUTPUT R	17	GND(AUDIO OUT R)
7	AUDIO OUTPUT L	18	GND(AUDIO OUT L)
8	AV1 VIDEO INPUT	19	GND(AV1 VIDEO IN)
9	AV2 VIDEO INPUT	20	GND(AV2 VIDEO IN)
10	AV2 AUDIO INPUT R	21	GND(AV2 AUDIO IN R)
11	AV2 AUDIO INPUT L	22	GND(AV2 AUDIO IN L)

- The colors of each wires can be changed under manufacturer's circumstance.

Activation by original buttons of BMW



BMW iDrive Controller



MINI iDrive Controller

For BMW & MINI Cooper

Button	Function	Operation	Remarks
1 MENU	Changing Modes	Press the button 2 seconds long.	Order: HDMI → NAVI → AV2 → OEM
1 MENU	Shortcut to each modes	Press the button 2 times. < OEM → NAVI >	
		Press the button 3 times. < OEM → AV2 >	
1 MENU	Back to OEM	Press the button short.	Return to the OEM mode in any modes.
1 MENU	System Locking / Unlocking	Press the button 10 seconds long.	If you visit car service center, you can lock the all functions of IW04M. It is only possible to use the OEM functions under it is locked.
LEFT PUSH	Changing mode to Front View Camera mode(AV1)	Push the button left 2 seconds long.	It changes the screen from any modes to AV1 mode directly.
RIGHT PUSH	Changing screen ratio <16:9 ↔ 4:3>	Push the button right 2 seconds long.	You can use this function only for 3 modes. (HDMI, NAVI, AV2)
2 BACK	Reset to factory default setting and power.	Press the button 10 seconds long.	You can use this function when you get in trouble to see the screen while setting the screen.

DIP Switch Settings



Pin No.	ON(▼)	OFF(▲)
1	HDMI Mode	Skip HDMI Mode
2	Navigation Mode	Skip Navigation Mode
3	External Rear View Camera	Original Rear View Camera
4	External Front View Camera(AV1 Mode)	Skip External Front View Camera(AV1 Mode)
5	AV2 Mode	Skip AV2 Mode
6	Selection of car model	
7		
8		
9		
10		

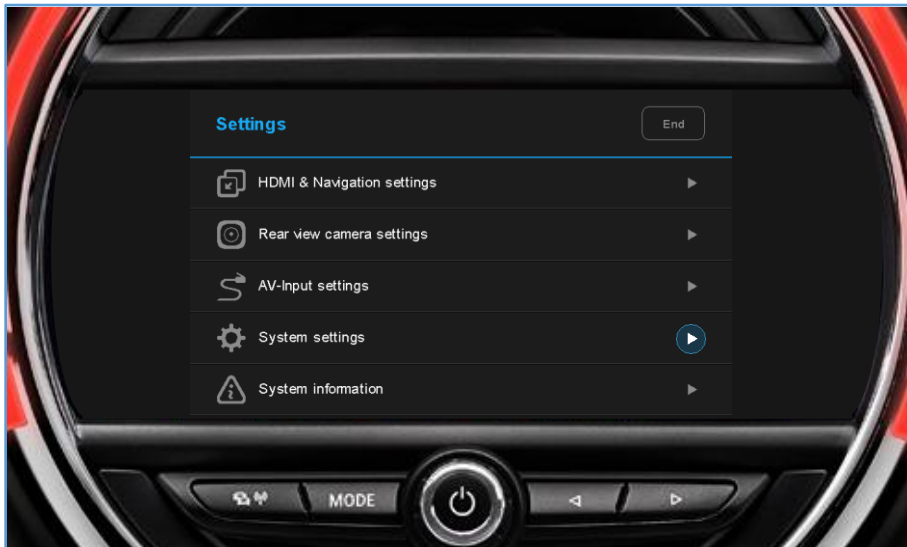
No.6	No.7	No.8	No.9	No.10	Car Models
OFF(▲)	OFF(▲)	OFF(▲)	OFF(▲)	OFF(▲)	5 Series (10.2-inch screen / F10)
OFF(▲)	OFF(▲)	OFF(▲)	OFF(▲)	ON(▼)	3 Series (8.8-inch screen / F30)
OFF(▲)	OFF(▲)	OFF(▲)	ON(▼)	OFF(▲)	Mini Cooper (8.8-inch screen / F56)

Settings

For BMW & MINI Cooper



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

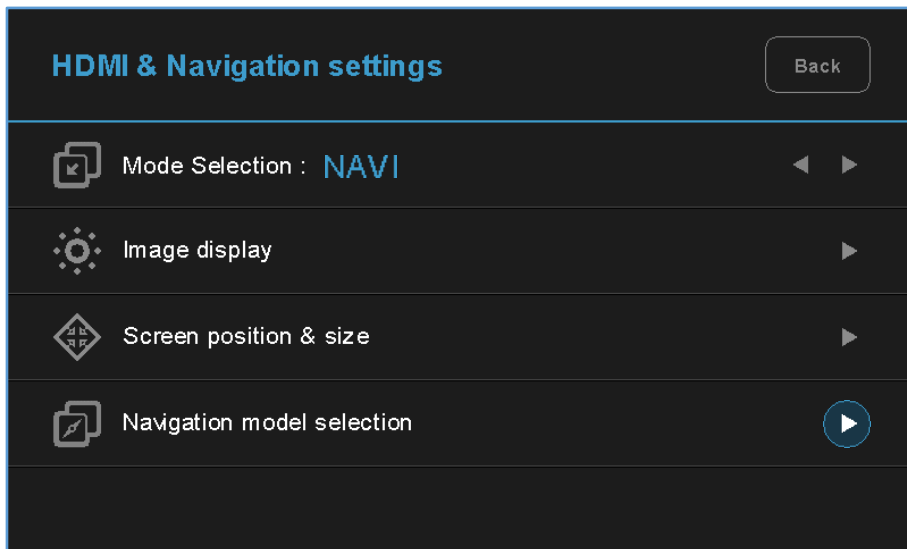
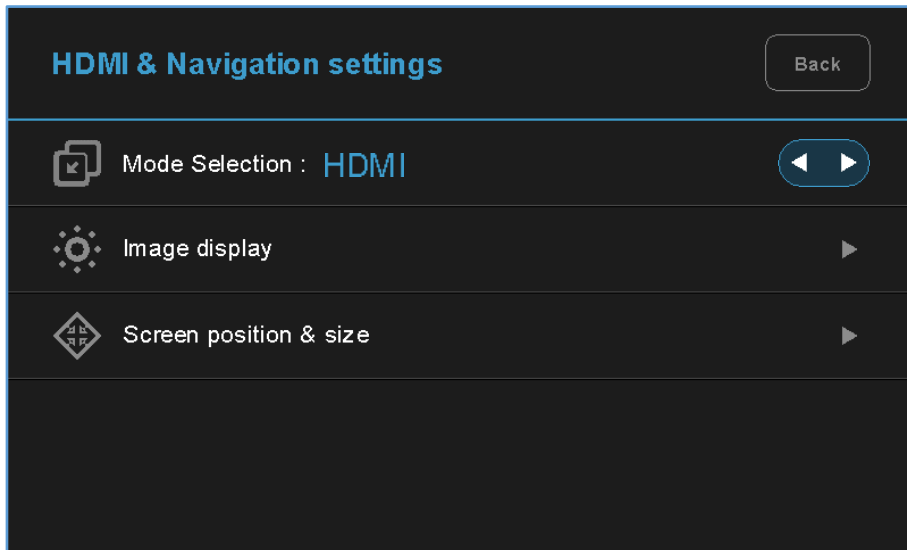


1. Enter into the setting menu.

<Press the 'OPTION' button 5 seconds long.>

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

Settings



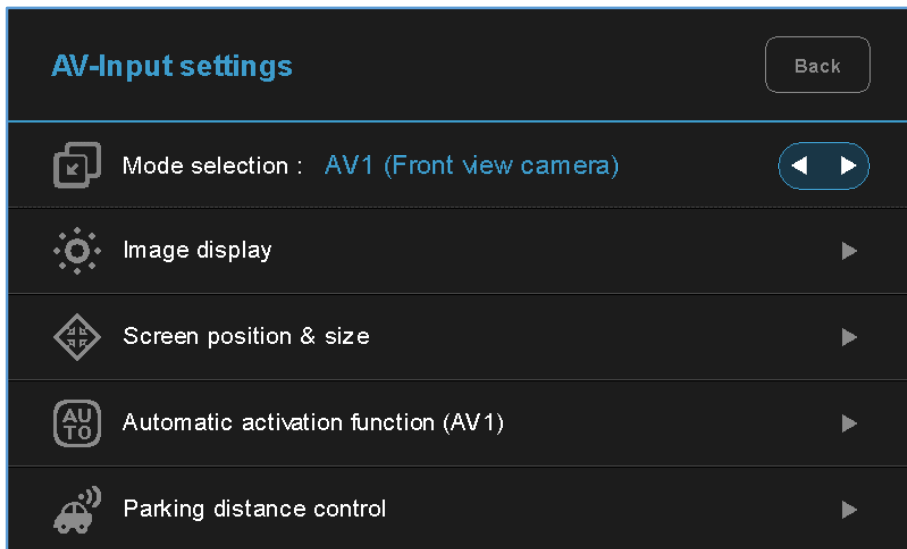
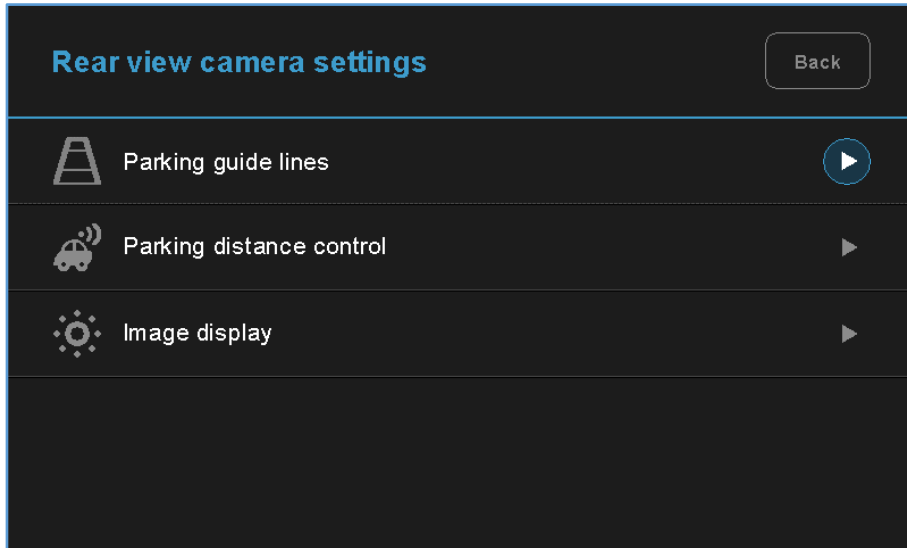
2. HDMI mode settings

- Mode selection: HDMI ↔ NAVI
- Image display
= Adjust the values of brightness and contrast Red-Green-Blue colors of HDMI display.
- Screen position & size
= Entry Disabled / Not applicable.

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
= Entry Disabled / Not applicable.
- Navigation model selection
= Entry Disabled / Not applicable.

Settings



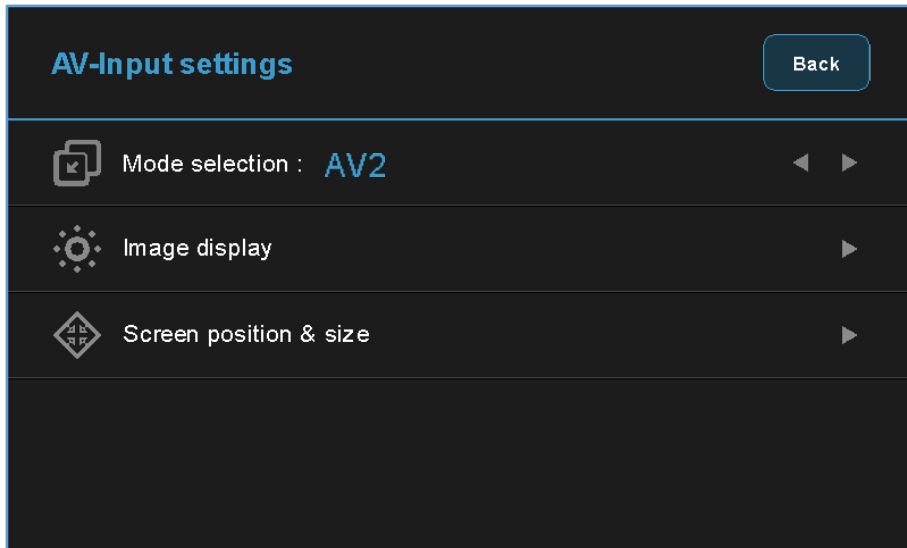
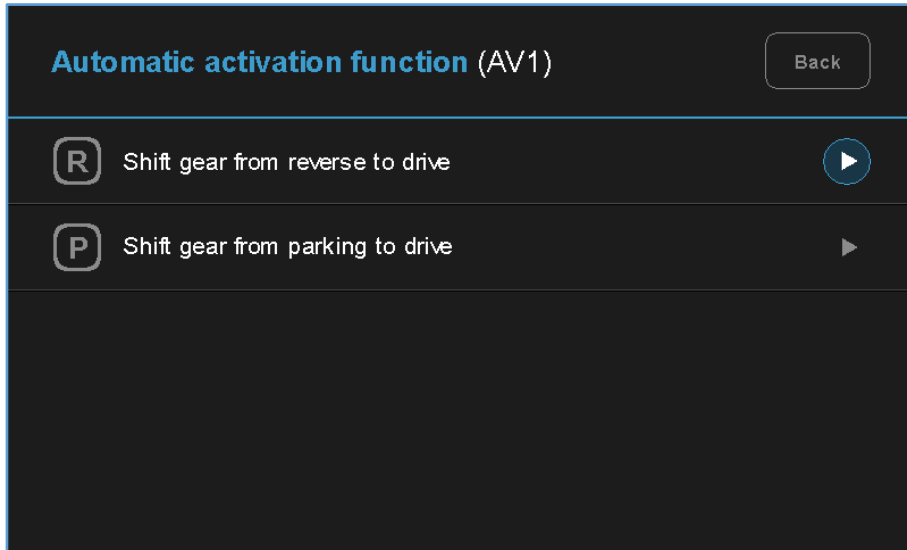
4. Rear view camera settings

- Parking guide lines
= Adjust position of parking guide lines and select the lines 'ON or OFF'.
- Parking distance control
= Entry Disabled / PDC function is always activated.
- 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
= Entry Disabled / Not applicable.
- Automatic activation function(AV1)
= * Please refer to next page.
- Parking distance control
= Entry Disabled / PDC function is always activated.

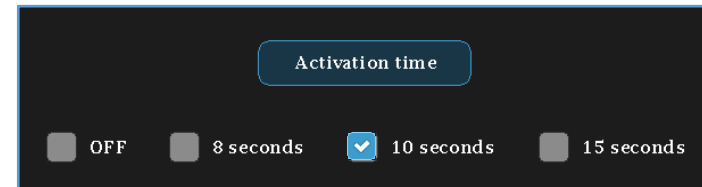
Settings



6. Automatic activation function(AV1)

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

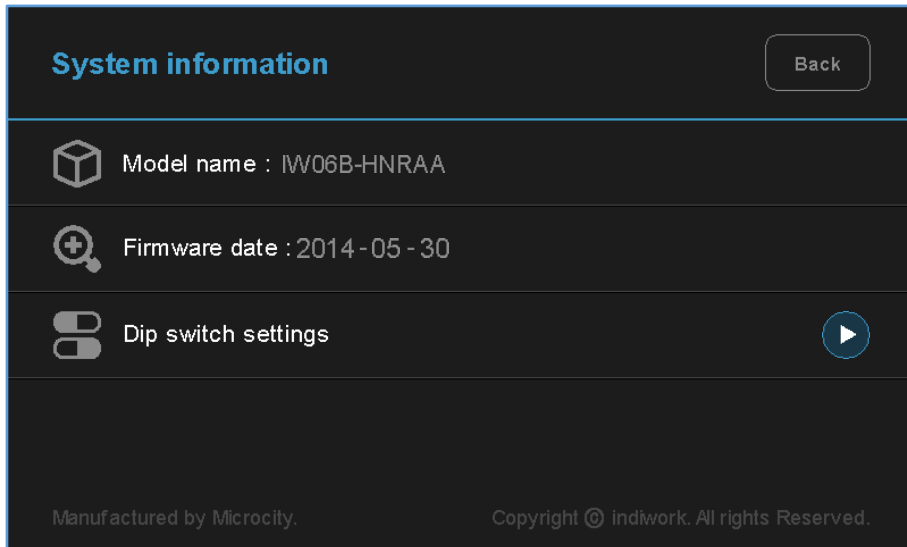
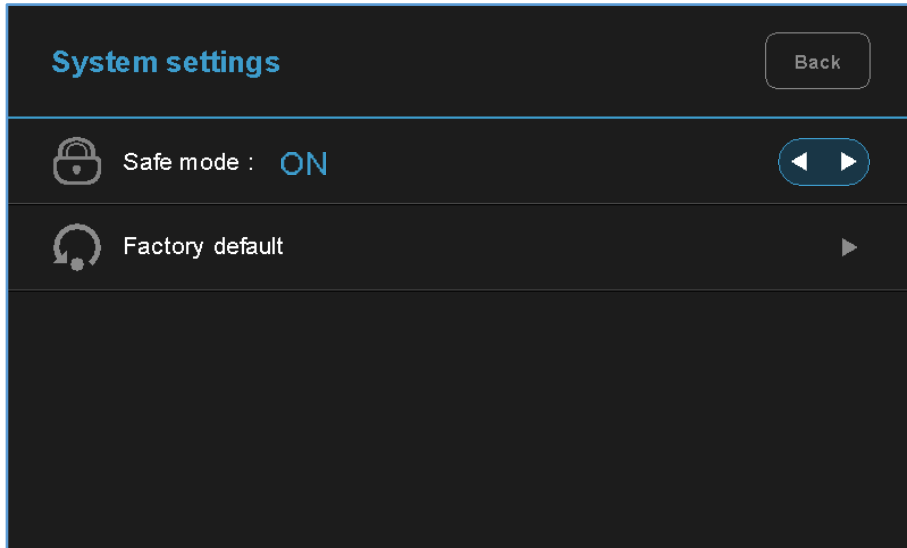
* When you shift gear 'from reverse to drive' or 'from parking to drive', it just works automatically during the activation time you selected.



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
= Entry Disabled / Not applicable.

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

- **Mode name: IW06B-HNRAA**

- **Firmware date: 2014 - 05 - 30(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


System information - Dip switch settings Back

	ON	OFF			
1	<input type="checkbox"/>	<input type="checkbox"/>	No. 1	HDMI	ON
2	<input type="checkbox"/>	<input type="checkbox"/>	No. 2	Navigation	ON
3	<input type="checkbox"/>	<input type="checkbox"/>	No. 3	External rear view camera	ON
4	<input type="checkbox"/>	<input type="checkbox"/>	No. 4	AV1	ON
5	<input type="checkbox"/>	<input type="checkbox"/>	No. 5	AV2	OFF
6	<input type="checkbox"/>	<input type="checkbox"/>	No. 6	Selection of car model	ON
7	<input type="checkbox"/>	<input type="checkbox"/>	No. 7		OFF
8	<input type="checkbox"/>	<input type="checkbox"/>	No. 8		OFF
9	<input type="checkbox"/>	<input type="checkbox"/>	No. 9		OFF
10	<input type="checkbox"/>	<input type="checkbox"/>	No. 10		ON

10. Information of Dip switch settings

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

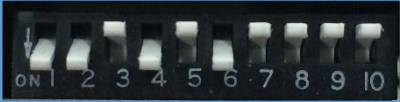
ex 1)
Actual DIP switch values. (→)



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

