

# BENZ\_W211(2011)-PAS-DC3

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- MODEL : Ver 2.0

- DATE : 2020.10.16



**GU ELECTRONIC**

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# 1. Main Spec.

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## 1. Input Spec. (MULTI VIDEO INTERFACE)

- 1 x Digital RGB Input (Navigation System source)
- 1 x Analog RGB Input (Navigation System output)
- 1 x CVBS(REAR CAMERA) Input. (Rear camera source)
- 1 x CVBS(FRONT CAMERA) Input. (Front camera source)
- 1 x LVDS Input. (Car Command System)

## 2. Output Spec.

- 1 x LCD Output (LCD Operation)

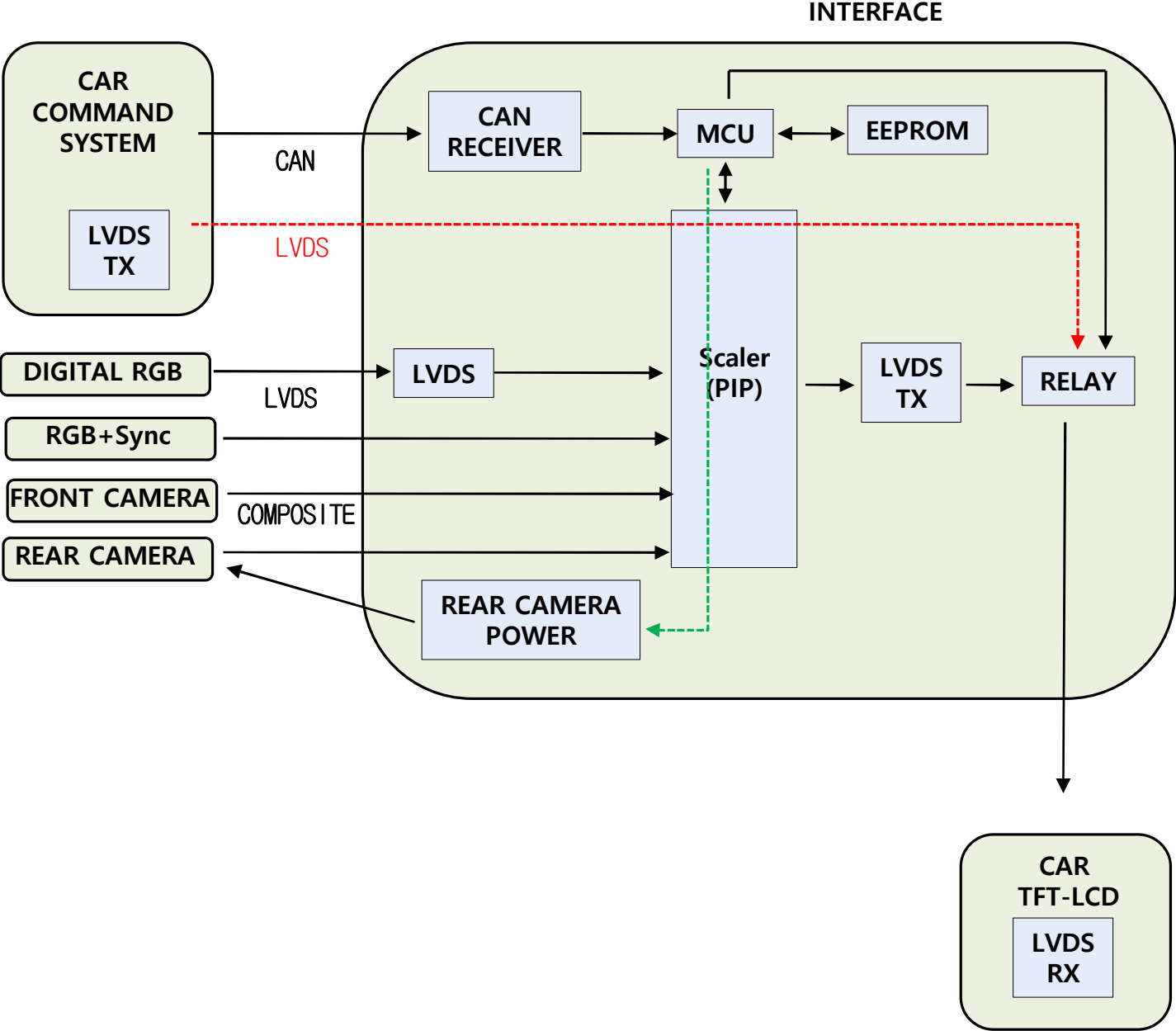
## 3. Power Spec.

- Input Power : 8VDC ~ 24VDC
- Consumption Power : 12Watt, Max

## 4. Switch Input mode

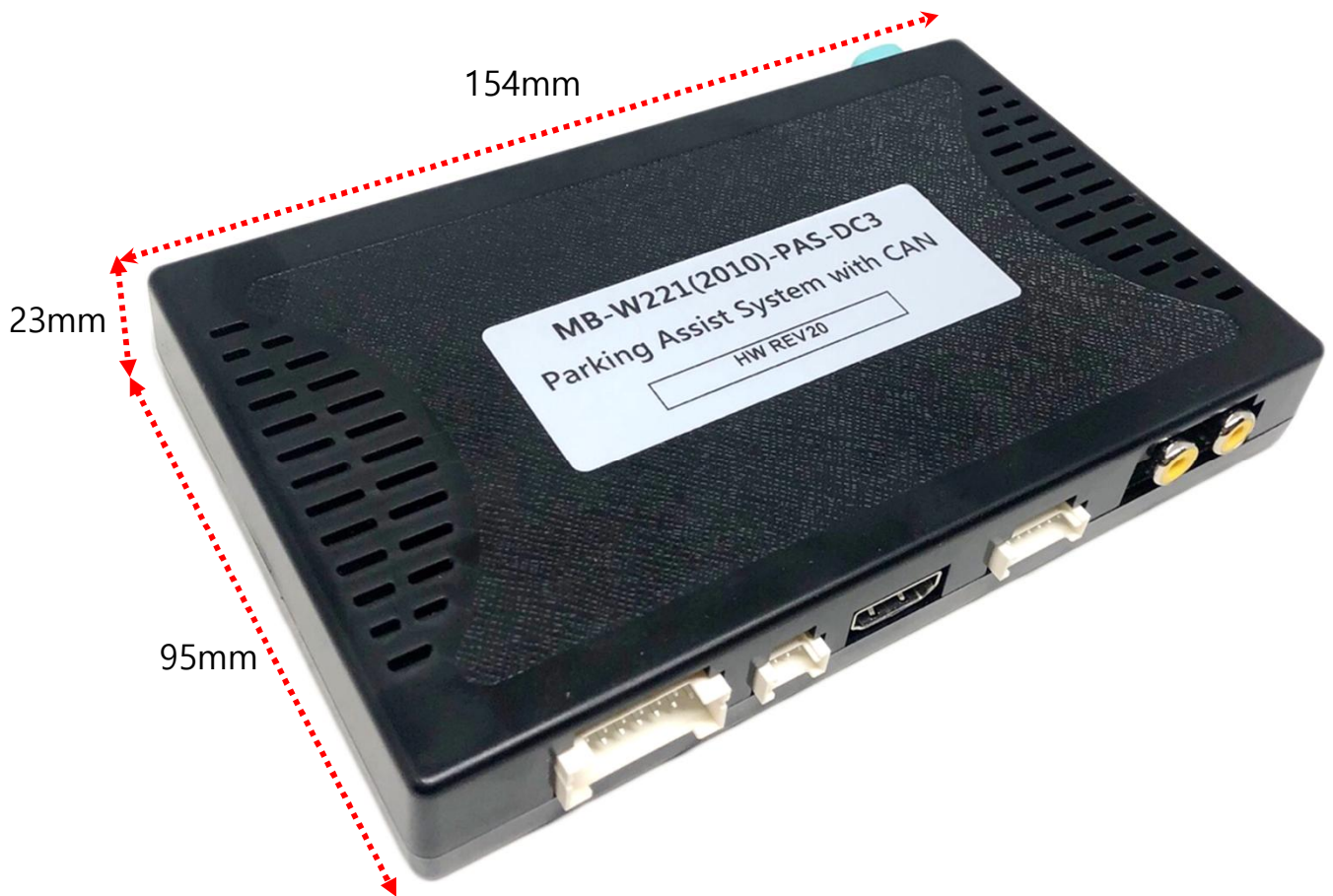
- Possible to select CAR model while switching mode by DIP S/W
- By button on the Commander in the car via CAN

# 2. Block Diagram



# 3. Dimension

154mm \* 95mm \* 23mm

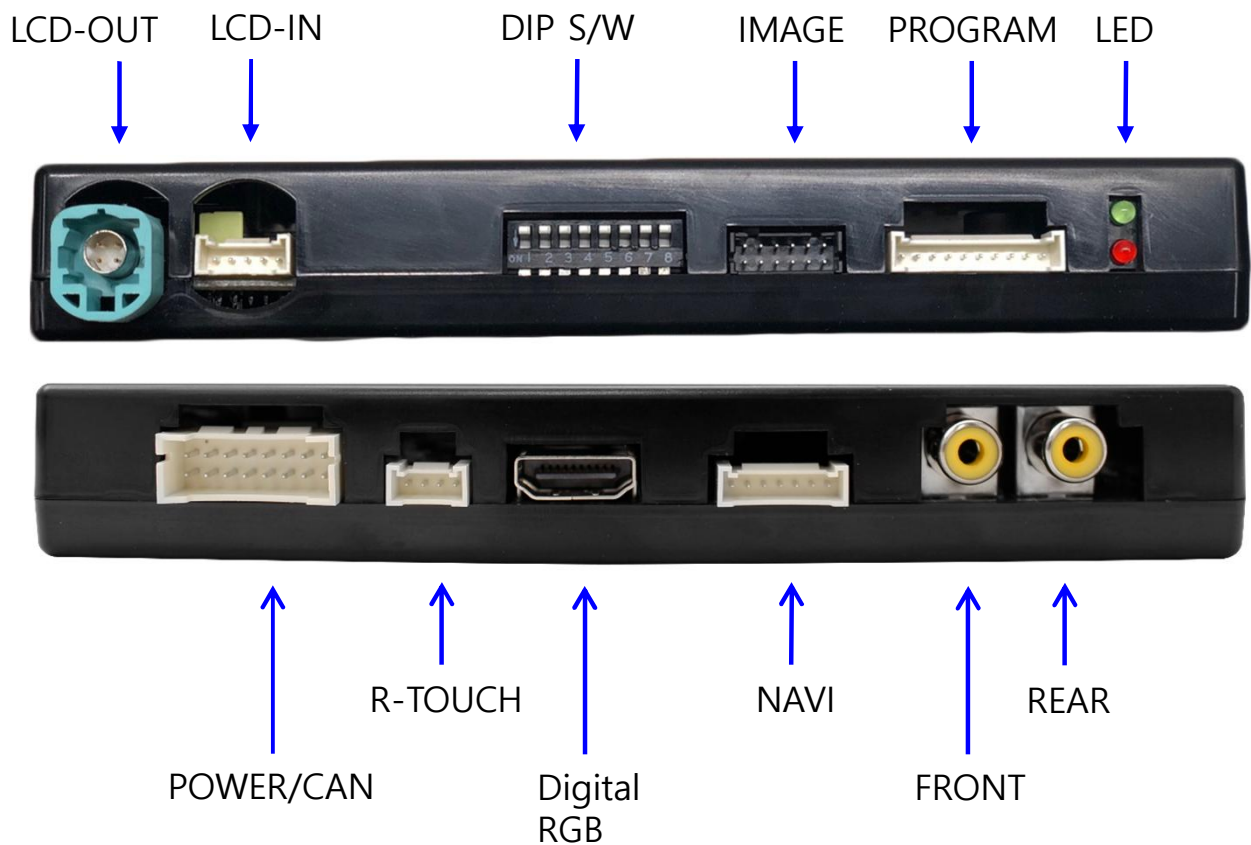


\* This can change under manufacturer's circumstance

# 4. External Appearance



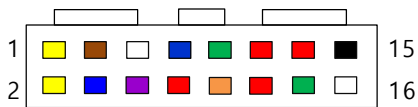
# 4. External Appearance



# 5. Connector Pin Assignment

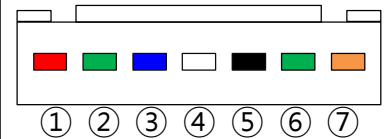


## \*POWER Connect



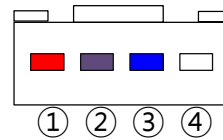
- |                     |                       |
|---------------------|-----------------------|
| 1. Battery (Yellow) | 9. CAN-L (Green))     |
| 2. Battery (Yellow) | 10. CAN-H (Orange)    |
| 3. Rear-DET (Brown) | 11. ACC-Power (Red)   |
| 4. Front-DET (Blue) | 12. Rear-Power (Red)  |
| 5. CAN-L (White)    | 13. Front-Power (Red) |
| 6. CAN-H (Purple)   | 14. Mode (Green)      |
| 7. CAN-L (Blue)     | 15. GND (Black)       |
| 8. CAN-H (Red)      | 16. GND (Black)       |

## \*NAVI Connect



- ① R DATA (Red)
- ② G DATA (Green)
- ③ B DATA (Blue)
- ④ SYNC (White)
- ⑤ GND (Black)
- ⑥ DVB-T-IR (Green)
- ⑦ DVD-IR (Orange)

## \*Touch Connect



- ① Y-
- ② X-
- ③ Y+
- ④ X+

\* Output current

- ACC POWER = Max 200mA
- REAR POWER = Max 200mA
- FRONT POWR = Max 200mA





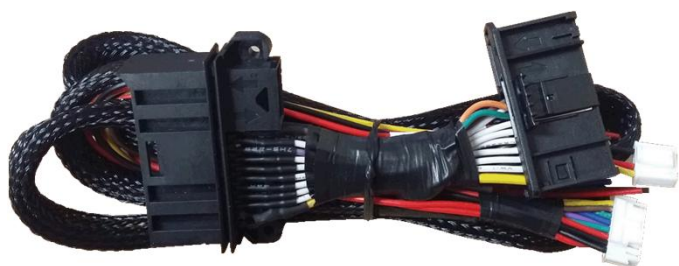
# 6. Product Composition



Interface 1 EA



OSD Board 1 EA



Power Cable 1 EA



LVDS Cable 1 EA



RGB NAVI Cable 1 EA



Touch Converter Cable 1 EA



# 6. Product Composition

\* CarPlay Set Sales(option) – KPLAY



Interface 1 EA



AUX Cable 1 EA



Power Cable 1 EA



HDMI Cable 1 EA



Bluetooth / Wifi Antenna 2EA



Microphone 1 EA



ACC Board 1 EA

# 6. Product Composition

\* CarPlay(NV17) Set Sales(option)



CarPlay Main 1 EA



AUX Cable 1 EA



Power Cable 1 EA



HDMI Cable 1 EA



ACC Board 1 EA



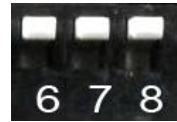
Microphone 1 EA

# 7. DIP S/W Setting

\* ON : DOWN , OFF : UP

PIN	FUNCTION	DIP S/W Selection
1	NAVI	ON : Not Used OFF : Used
2	DVB-T(AV1)	ON : Not Used OFF : Used
3	DVD(AV2)	ON : Not Used OFF : Used
4	N.C	
5	CAN IN/OUT	ON : Used OFF : Not Used
6	CAR type SEL	Right Picture
7		
8		

\* DIP S/W Example



S-class (2010~2013)  
8" Model



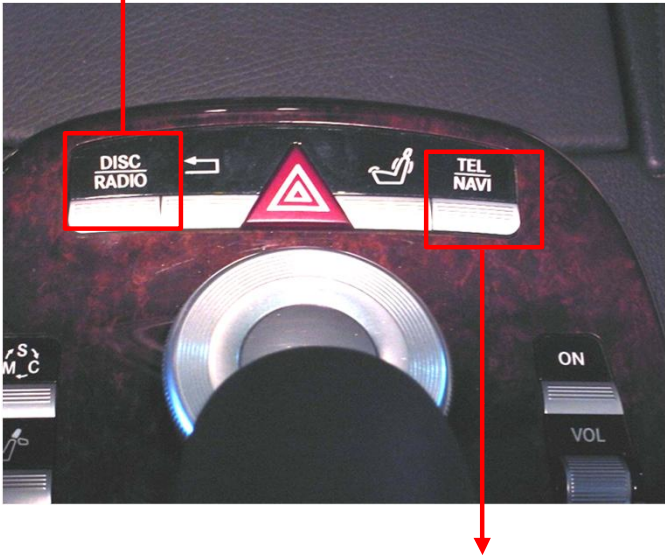
S-class (2010~2013)  
8" Model - SplitView

\* To use CarPlay, be sure to turn down Dip-sw 5.

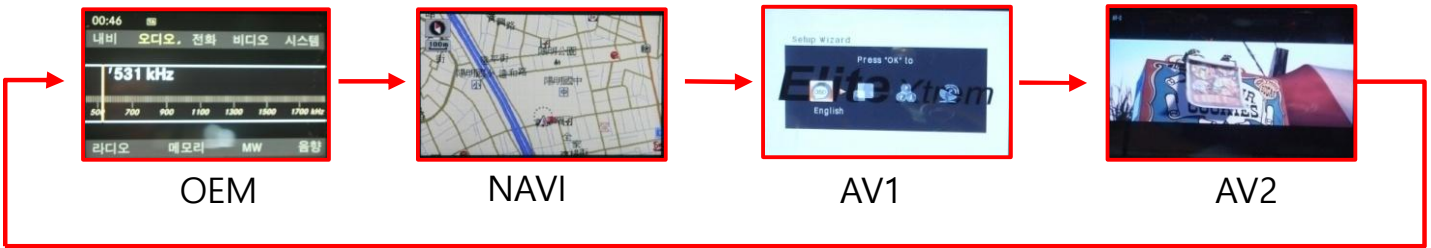
# 8. I-DRIVE Control

## Mode Change

Short press to mode change

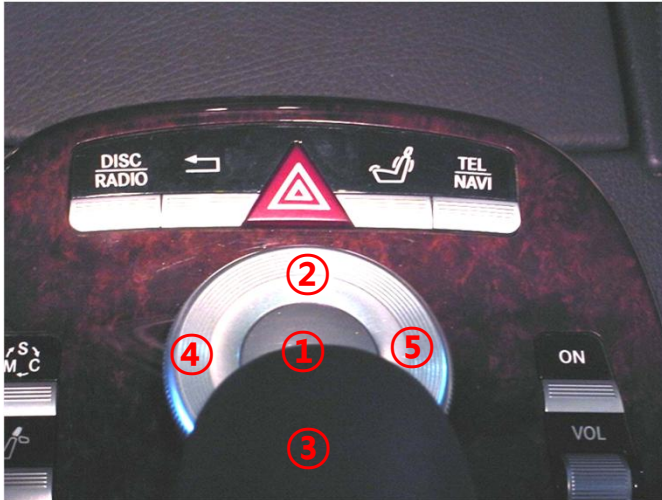


Long press to mode change



# 8. I-DRIVE Control

Benz I-Drive control : DVB-T(DMB) Control



- DVB-T UI on operation status

- ① Long press to DVB-T UI on
- ① Short press to Selection
- ④ Move UI Left
- ⑤ Move UI Right

- DVB-T UI off operation status

- ② Short press to channel Up
- ③ Short press to channel Down
- ② Long press to SCAN

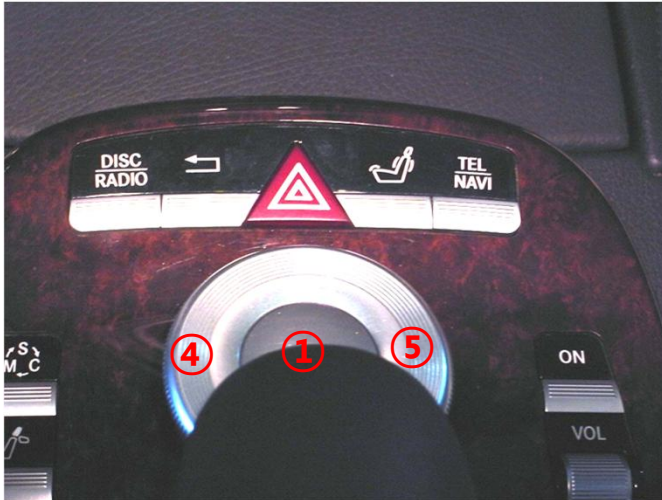


MENU	UI DVB-T(DMB)	OEM
Config	SteeringWheelBtn	Off
Option	BookMarkBtn	Off
Image	UI DVB-T(DMB)	On Off
Screen	UI DVD	On
Parking	Reset	Execute Cancel

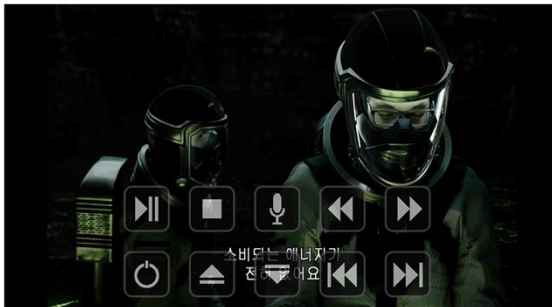
DVB-T UI → on/off selection to OSD MENU

# 8. I-DRIVE Control

Benz I-Drive control : DVD Control



- DVB-T UI on operation status
- ① Long press to DVB-T UI on
- ① Short press to Selection
- ④ Move UI Left
- ⑤ Move UI Right

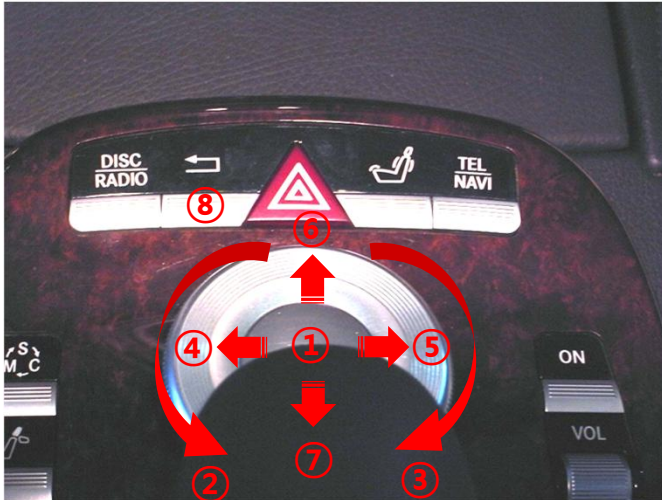


MENU	UI DVD	OEM
Config	SteeringWheelBtn	Off
Option	BookMarkBtn	Off
Image	UI DVB-T(DMB)	On
Screen	UI DVD	On Off
Parking	Reset	Execute Cancel

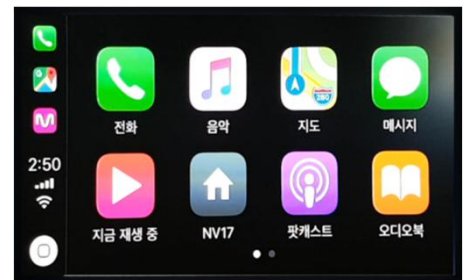
DVD UI -> on/off selection to OSD MENU

# 8. I-DRIVE Control

Benz I-Drive control : CarPlay Control



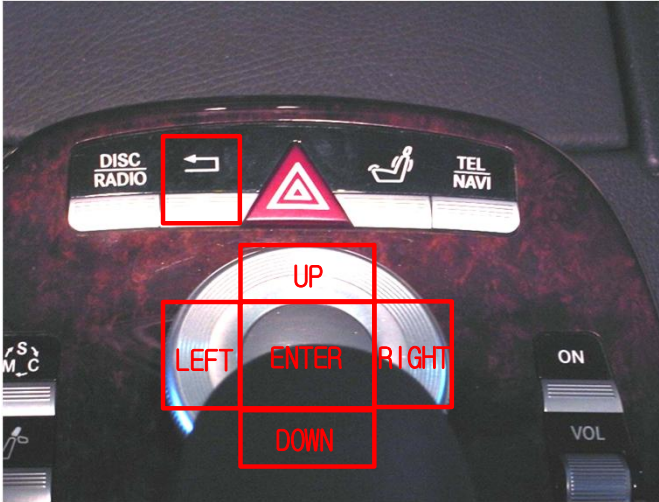
- ① PUSH : Selection
- ② Moving left
- ③ Moving right
- ④ if Carplay, Track down  
if Android auto, Moving right
- ⑤ if Carplay, Track up  
if Android auto, Moving right
- ⑥ Moving up
- ⑦ Moving down
- ⑧ Long Press : Mode Change  
Short Press : Back
- ⑨ Short Press : Siri call





# 9. OSD(On Screen Display) Control

OSD control



Return	Press for 6 seconds to turn on OSD Press short to MENU EXIT
ENTER	Item Selection, Value Selection
UP	Item up Increase selected value
RIGHT	First->Second->Third Menu move Third Menu에서 Item down Increase selected value
DOWN	Item down Decrease selected value
LEFT	Third->Second->First Menu move Third Menu에서 Item up Decrease selected value

Mode State

MENU	Option	
		NAVI
Config	RearCam-Type	ExtDevice
Option	RearCam-Power	Auto
Image	RearCam-Det	GEAR
Screen	AV Mode	Off
Parking	FrontCam-Type	ExtDevice

First Menu

Second Menu

Third Menu



GU Electronic

# 9. OSD(On Screen Display) Control

## OSD Config

First Menu	Second Menu	Third Menu	Description
Config	NAVI-RGB	DIGITAL-INAVI :	Setting the Connected NAVI Model
	DVB-T(DMB)	ELT_DVBT20 :	Setting the Connected DVB-T Model
	DVD	ELT_980XU Slim :	Setting the Connected DVD Model
	Reset	Execute	Reset to default value of Config menu

MENU	Config	NAVI
Config	NAVI-RGB	DIGITAL-INAVI
Option	DVB-T(DMB)	ELT_DVBT20
Image	DVD	ELT-980XU Slim
Screen	Reset	Execute Cancel
Parking		

# 9. OSD(On Screen Display) Control

## OSD - Option Menu

First Menu	Second Menu	Third Menu	Description
Option	NAVI COM	HMS FINE :	Set up manufacturer of woodworking device for UART Touch use
		OFF	Do not use features.
	RearCam-Type	OEM	Original Camera
		ExtDevice	Equipped with external camera
	RearCam-Power	ON	+ 12V continuous supply
		AUTO	+ 12V supply only in Rear camera mode
		OFF	+ 12V off
	RearCam-Det	GEAR	Detected by CAN
		WIRE	Detected by Rear-Det Wire
	FrontCam-Type	OEM	Original Camera
		ExtDevice	Equipped with external camera
	FrontCam-RcvOpt	ON	After RearCam shows FrontCam and returns to previous state
		OFF	Disable feature
	SteeringWheel Btn	ON	To use the Steering button You must select the "ON" button in the menu
		OFF	Do not use features.
	UI DVB-T (DMB)	ON	DVB-T device control UI output function
		OFF	Disable feature
	UI DVD	ON	DVD device control UI output function
		OFF	Disable feature
	Reset	Execute	Option Menu all Reset

# 9. OSD(On Screen Display) Control

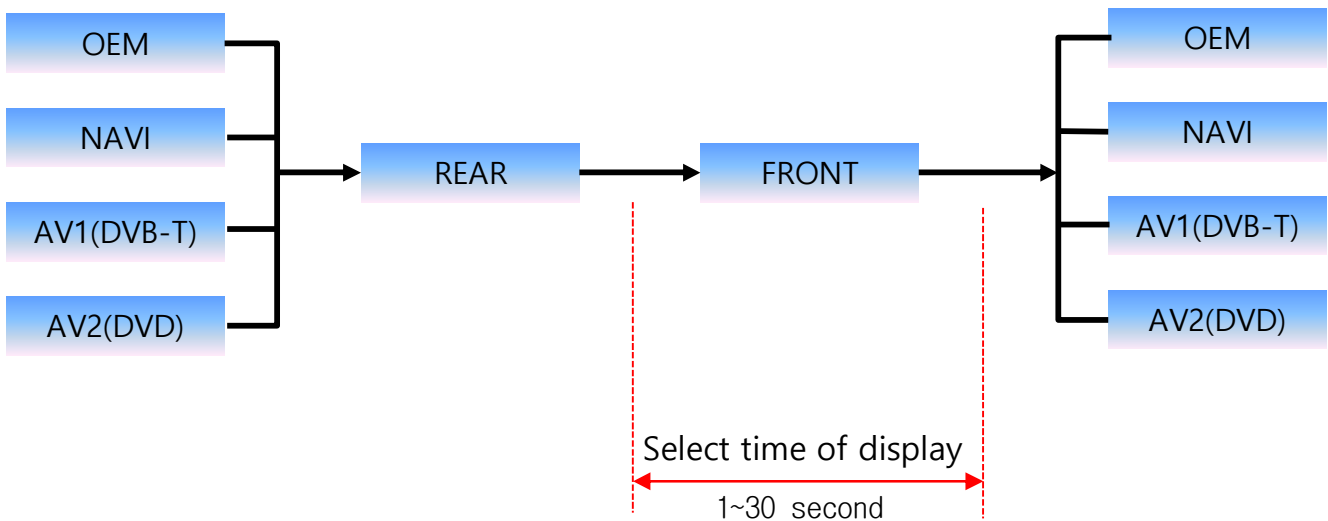
## OSD Option -> FrontCam-RcvOpt

### Front Camera Auto Mode

- 0 second = FrontCam-RcvOpt menu OFF
- 1~30 second = FrontCam-RcvOpt menu ON & time control

MENU	FrontCam-RcvOpt	NAVI
Config	FrontCam-Power	Auto
Option	FrontCam-Det	ExtWire
Image	FrontCam-RcvOpt	<input type="text"/> 0s
Screen	Steering Wheel	Voice
Parking	Reset	Execute Cancel

MENU	FrontCam-RcvOpt	NAVI
Config	FrontCam-Power	Auto
Option	FrontCam-Det	ExtWire
Image	FrontCam-RcvOpt	<input type="text"/> 30s
Screen	Steering Wheel	Voice
Parking	Reset	Execute Cancel



# 9. OSD(On Screen Display) Control

NAVI-RGB menu

First Menu	Second Menu	Third Menu	Action
Image	Brightness		Adjust the value of brightness
	Contrast		Adjust the value of contrast
	Color-RED		Adjust the value of RED
	Color-GREEN		Adjust the value of GREEN
	Color-BLUE		Adjust the value of BLUE
	Reset	Excute	Option Menu all Reset

DVD,DVB-T(DMB),NAVI-AV,REAR,FRONT menu

First Menu	Second Menu	Third Menu	Action
Image	Brightness		Adjust the value of brightness
	Contrast		Adjust the value of contrast
	Saturation		Adjust the value of Saturation
	Hue		Adjust the value of Hue
	Sharpness		Adjust the value of Sharpness
	Reset	Excute	Option Menu all Reset



<< Brightness >>



<< Contrast >>



<< Saturation >>



# 9. OSD(On Screen Display) Control

## OSD – Screen Menu

First Menu	Second Menu	Third Menu	Description
Screen	Horizontal		Output screen horizontal movement
	Vertical		Output screen vertical movement
	Scale X Up		Reduce / increase output screen width
	Scale X Down		
	Scale Y Up		Reduce / Increase Output Screen Height
	Scale Y Down		
	Reset		Screen menu all reset

MENU	Horizontal	NAVI
Config	Horizontal	50
Option	Vertical	50
Image	Scale X Up	50
Screen	Scale X Down	50
Parking	Scale Y Up	50

# 9. OSD(On Screen Display) Control

## OSD – Parking Menu

First Menu	Second Menu	Third Menu	Description
Parking	OPS Display	ON	Show OPS
		OFF	Do not show OPS
	Line Display	ON	Show parking line
		OFF	Do not show parking lines
	Warnings Lang		Set warning text language
	Horizontal		Moving a parking line horizontally
	Vertical		Moving a parking line vertically
	Transparency		Parking line transparency
	Reset		Parking menu all reset

MENU	OPS Display	REAR
Config	OPS Display	Off
Option	Line Display	Off
Image	Warnings Lang	English
Screen	Horizontal	<input type="range"/> 50
Parking	Vertical	<input type="range"/> 60

# 9. OSD(On Screen Display) Control

## OSD Parking – OPS Display On / Off

MENU	OPS Display		REAR
Config	OPS Display	On	Off
Option	Line Display	Off	
Image	Warnings Lang	English	
Screen	Horizontal	<input type="range"/>	50
Parking	Vertical	<input type="range"/>	60



OPS ON Screen

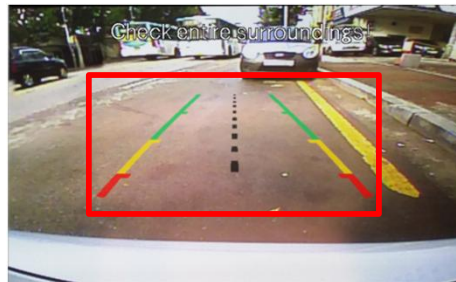
MENU	OPS Display		REAR
Config	OPS Display	On	Off
Option	Line Display	Off	
Image	Warnings Lang	English	
Screen	Horizontal	<input type="range"/>	50
Parking	Vertical	<input type="range"/>	60



OPS OFF Screen

## OSD Parking – Guide line On / Off

MENU	Parking / Line Display		REAR
Config	OPS Display	On	
Option	Line Display	On	Off
Image	Warnings Lang	Россия	
Screen	Horizontal	<input type="range"/>	50
Parking	Vertical	<input type="range"/>	50



Parking Line ON Screen

MENU	Parking / Line Display		REAR
Config	OPS Display	On	
Option	Line Display	On	Off
Image	Warnings Lang	Россия	
Screen	Horizontal	<input type="range"/>	50
Parking	Vertical	<input type="range"/>	50



Parking Line OFF Screen





# 9. OSD(On Screen Display) Control

## OSD Parking – Change warning language

MENU	Parking / Warnings Lang	REAR
Config	OPS Display	English
Option	Line Display	中文
Image	Warnings Lang	한국어
Screen	Horizontal	台灣
Parking	Vertical	Россия

English

Check entire surroundings!

中文

请注意车辆周围环境!

한국어

차량 주변을 전부 확인

台灣

請注意車輛周圍環境!

Россия

Следите за всем окружением автомобиля!

日本

周辺の安全を確認



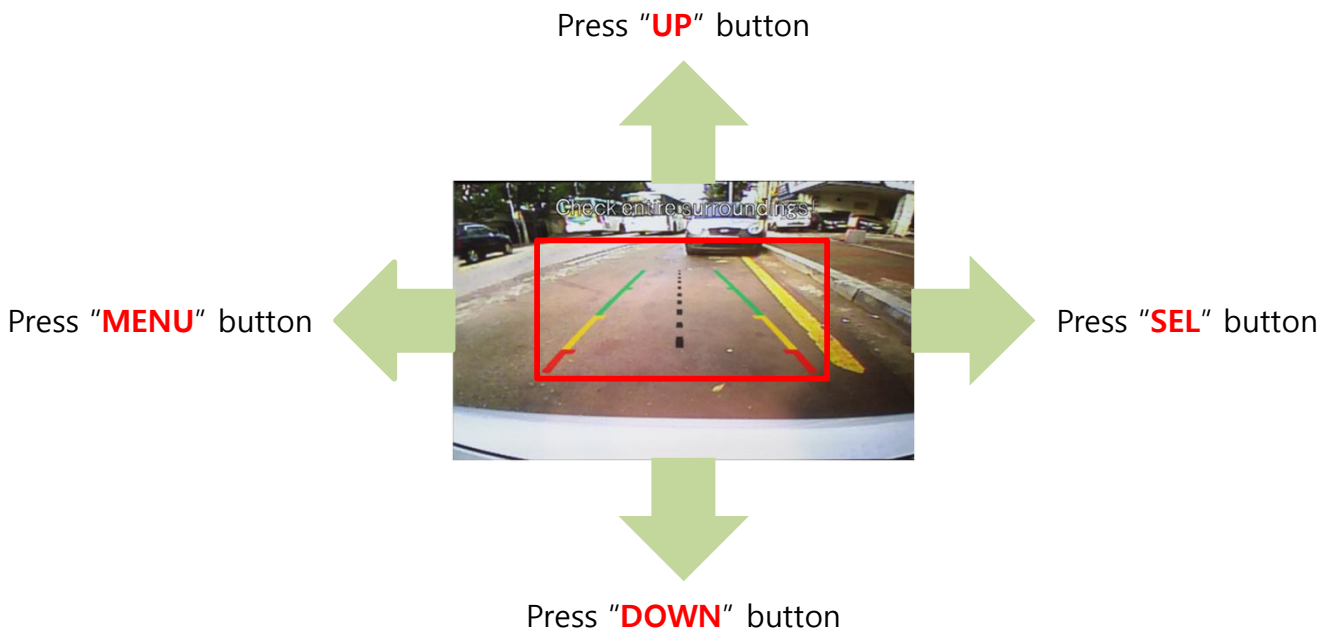
# 9. OSD(On Screen Display) Control

## OSD Parking – Adjust position of parking guide line

MENU	Parking	REAR
Config	OPS Display	Off
Option	Line Display	On
Image	Warnings Lang	English
Screen	Horizontal	50
Parking	Vertical	50

Possible to adjust the position of parking guide line by Keypad in Horizontal / Vertical menu

※ Pressing this Horizontal / Vertical menu, The OSD screen automatically disappears. Please adjust from the parking line Screen.



# 9. OSD(On Screen Display) Control

## OSD – OSD Menu

First Menu	Second Menu	Third Menu	Description
OSD	Horizontal	<i>value</i>	OSD Menu Horizontal Shift
	Vertical	<i>value</i>	OSD menu vertical Shift
	Display Time	<i>value</i>	OSD Menu Display Time (in seconds)
	Transparency	<i>value</i>	OSD menu transparency
	Language		OSD menu display language
	Reset	Execute	Initialize OSD settings

MENU	Horizontal		DVB-T
OSD	Horizontal	<input type="text" value="50"/>	50
IR-Ctrl	Vertical	<input type="text" value="50"/>	50
Utility	Display Time	<input type="text" value="10s"/>	10s
	Transparency	<input type="text" value="30"/>	30
	Language	English	
MENU	Reset		DVB-T
OSD	Reset	Execute	Cancel
IR-Ctrl			
Utility			

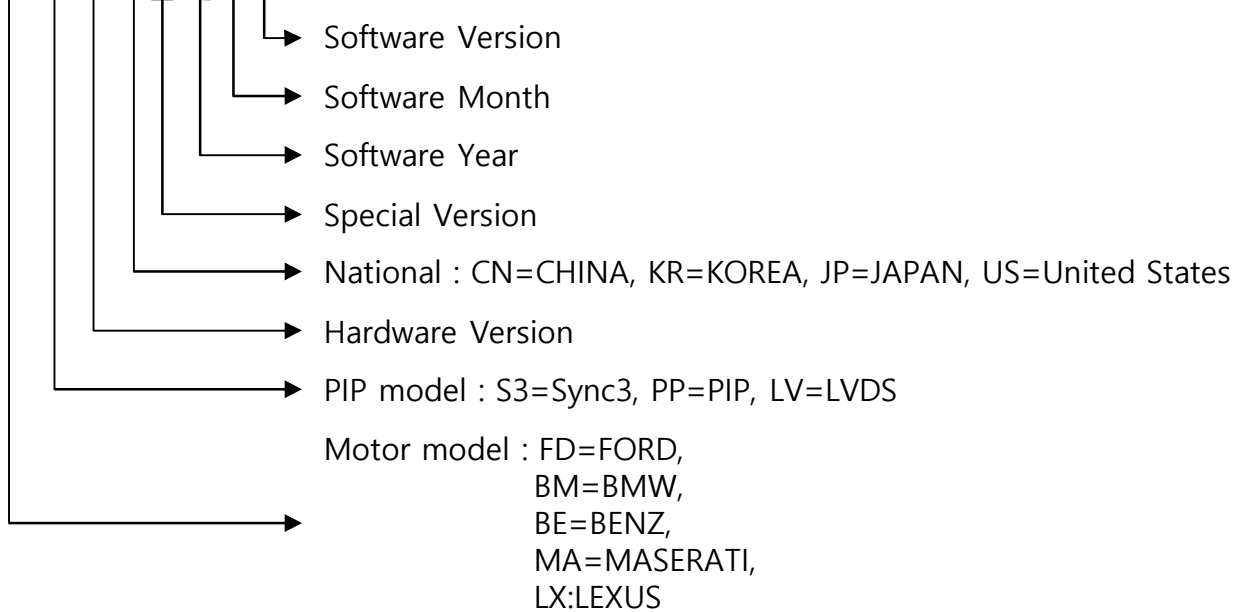


# 9. OSD(On Screen Display) Control

## OSD – Utility Menu

First Menu	Second Menu	Third Menu	Description
Utility	Factory Reset	Execute	Initialize all settings
Utility	Version		FDSYOOKRX-180209 (Check for future upgrades)

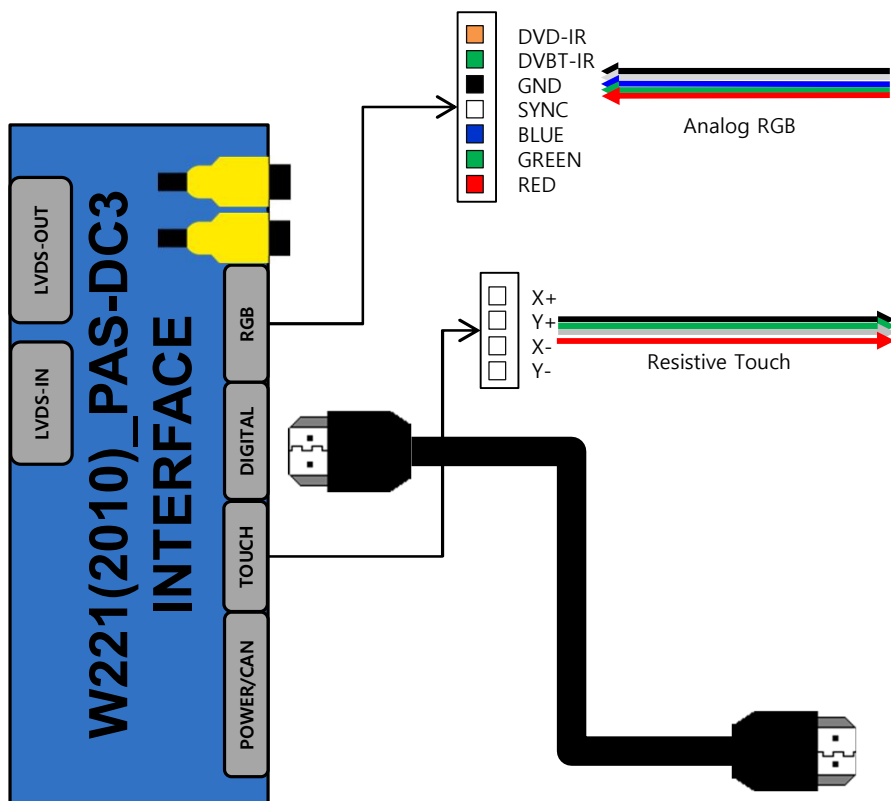
Last Source : FDSYOOKRX-180209



MENU	Utility	NAVI
OSD	Factory Reset	Execute Cancel
IR-Ctrl	Version	FDSYOOKRX-180209
Utility		

# 10. Install Manual

## 1. Installation Navigation Connection

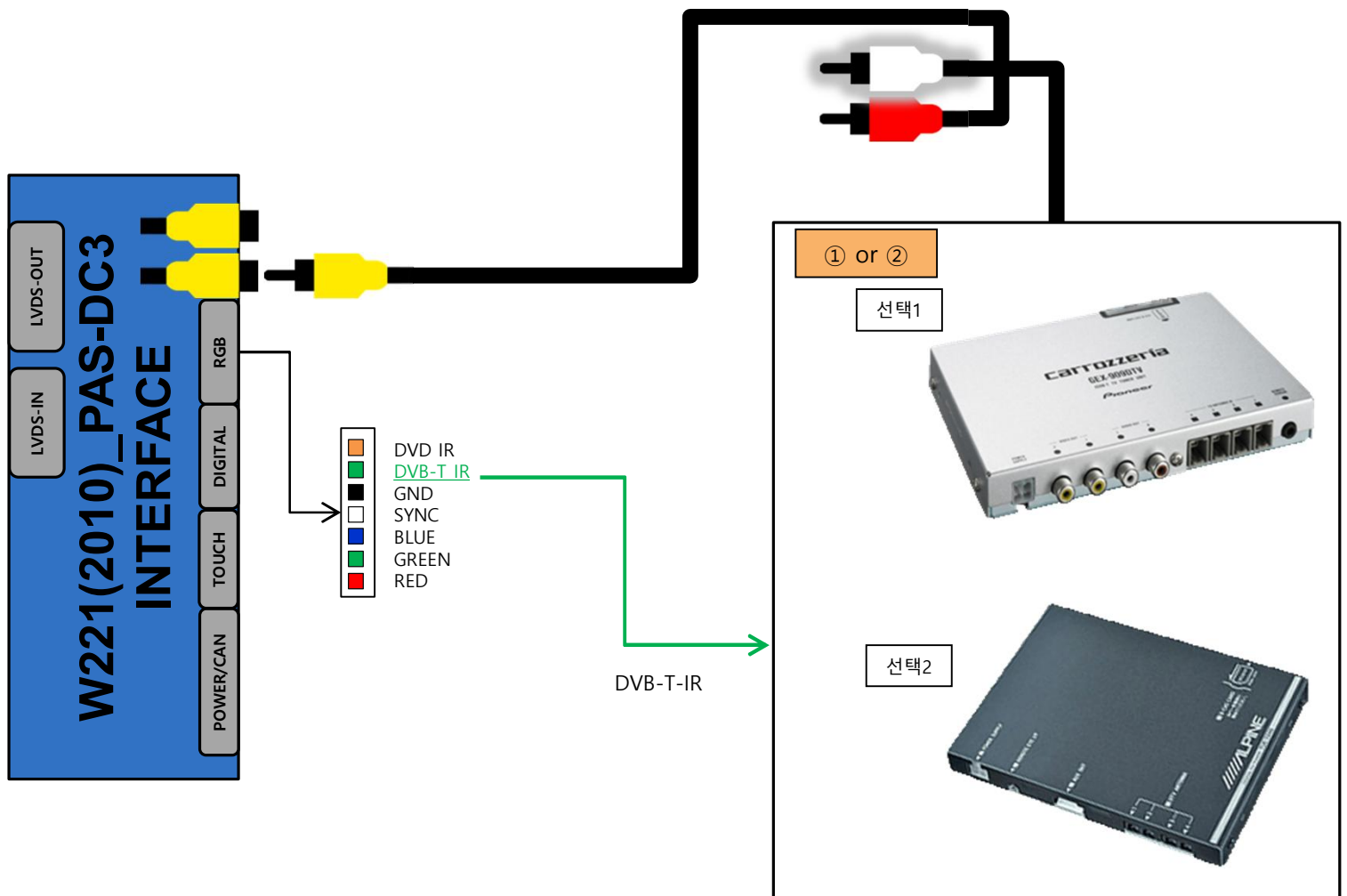


MENU	NAVI-RGB	NAVI
Config	NAVI-RGB	DIGITAL-G-NOM-A
Option	DVB-T(DMB)	DIGITAL-G-NOM-G
Image	DVD	DRGB-M2C-1920
Screen	RearCam	DIGITAL-KPLAY
Parking	FrontCam	DRGB-KPLAY-1280

- Select the navigation you want to use from the above items.

# 10. Install Manual

## 2. Installation DVB-T Remote Control Connection



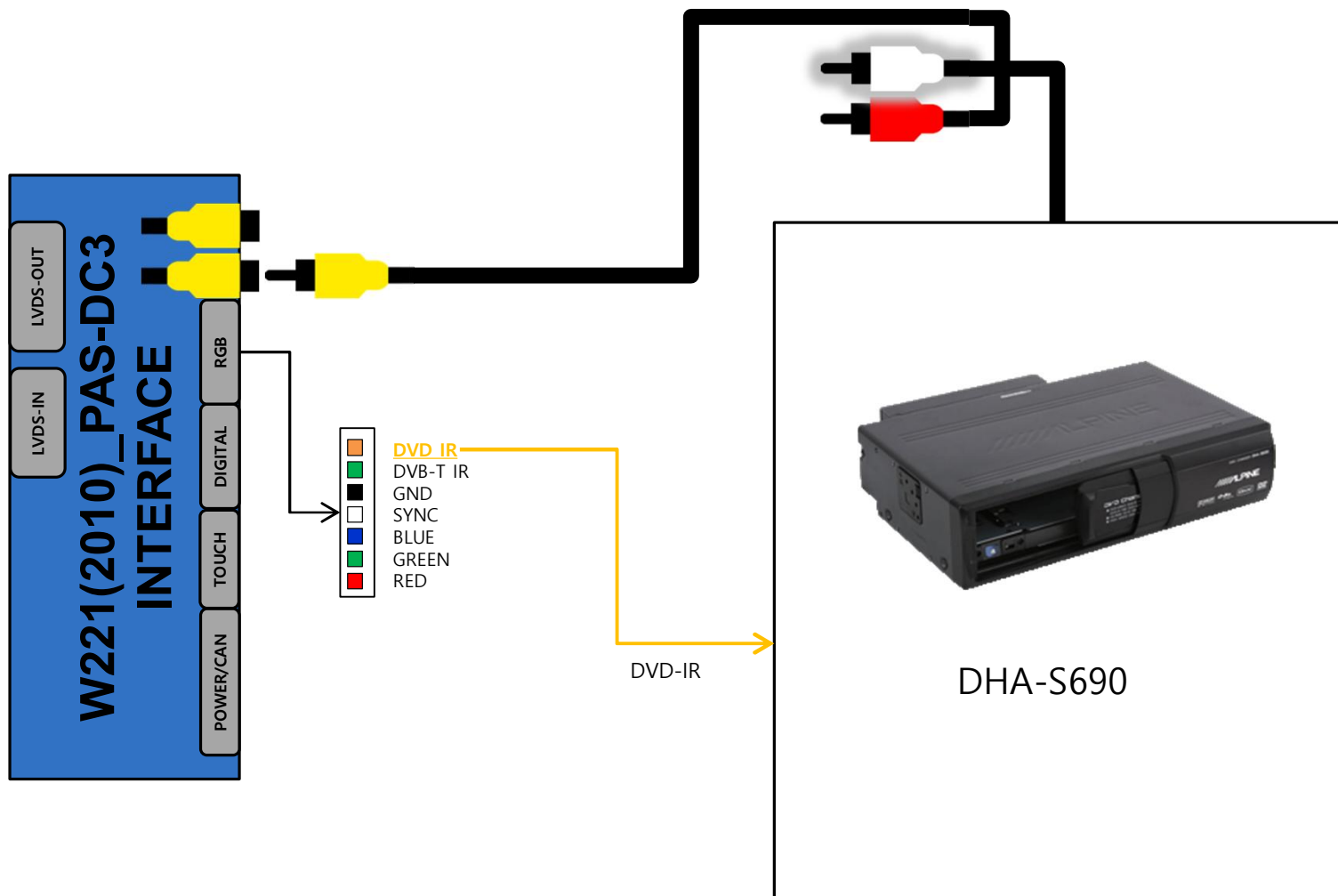
MENU	DVB-T(DMB)	DVB-T
Config	NAVI-RGB	ELT_DVBT20
Option	DVB-T(DMB)	NET-770
Image	DVD	MediaLife
Screen	RearCam	Panasonic
Parking	FrontCam	Pioneer

MENU	UI DVB-T(DMB)	DVB-T
Config	FrontCam-Type	ExtDevice
Option	FrontCam-RcvOpt	8s
Image	SteeringWheelBtn	Off
Screen	UI DVB-T(DMB)	On Off
Parking	UI DVD	On

- Select the DVB-T you want to use from the above items.

# 10. Install Manual

## 3. Installation DVD Remote Control Connection



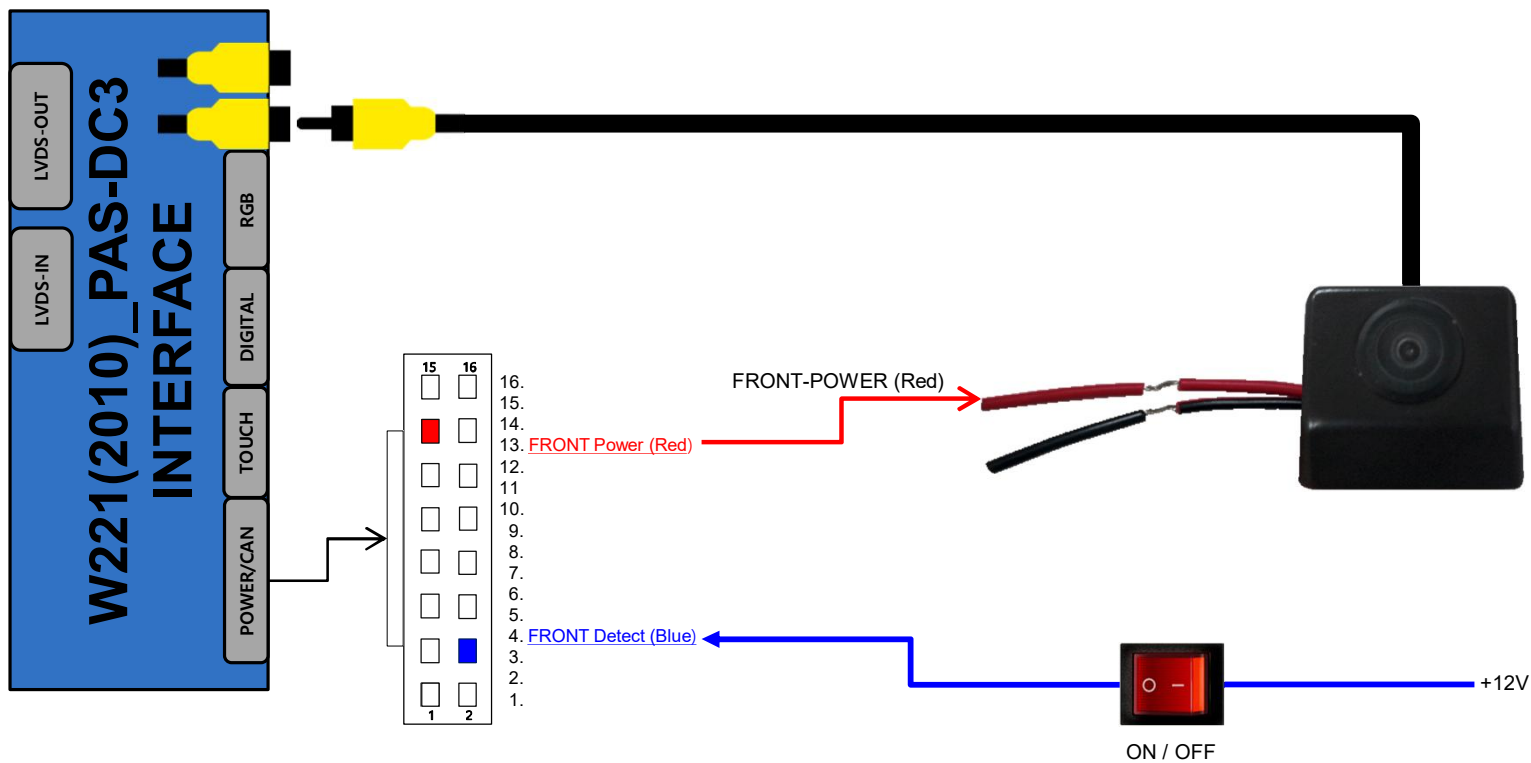
MENU	DVD	DVD
Config	NAVI-RGB	ELT-980XU Slim
Option	DVB-T (DMB)	LCKT
Image	DVD	Sanyo
Screen	RearCam	NECVOX DVA-3206
Parking	FrontCam	AMPIRE DVX-101

MENU	UI DVD	DVD
Config	FrontCam-Type	ExtDevice
Option	FrontCam-RcvOpt	8s
Image	SteeringWheelBtn	Off
Screen	UI DVB-T (DMB)	On
Parking	UI DVD	On Off

- Select the DVD you want to use from the above items.

# 10. Install Manual

## 4. Installation External Front Camera Connection



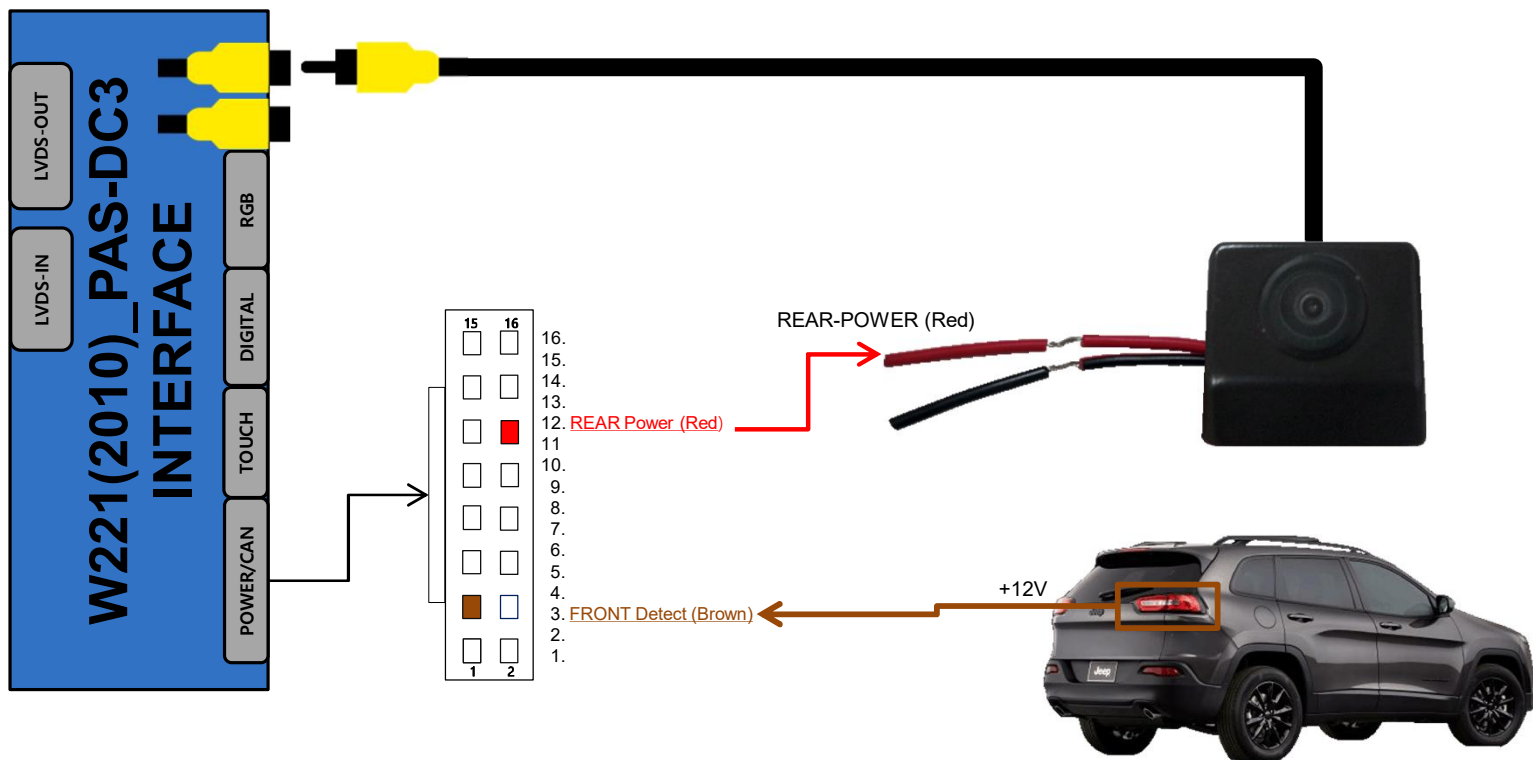
MENU	FrontCam-RcvOpt	AV
Config	FrontCam-Type	ExtDevice
Option	FrontCam-RcvOpt	8s
Image	SteeringWheelBtn	Off
Screen	UI DVB-T(IMB)	On
Parking	UI DVD	On

- Refer to page. 10. OSD (On Screen Display) Control -> OSD option -> FrontCam-RcvOpt.



# 10. Install Manual

## 5. Installation External Reverse(Rear) Camera Connection

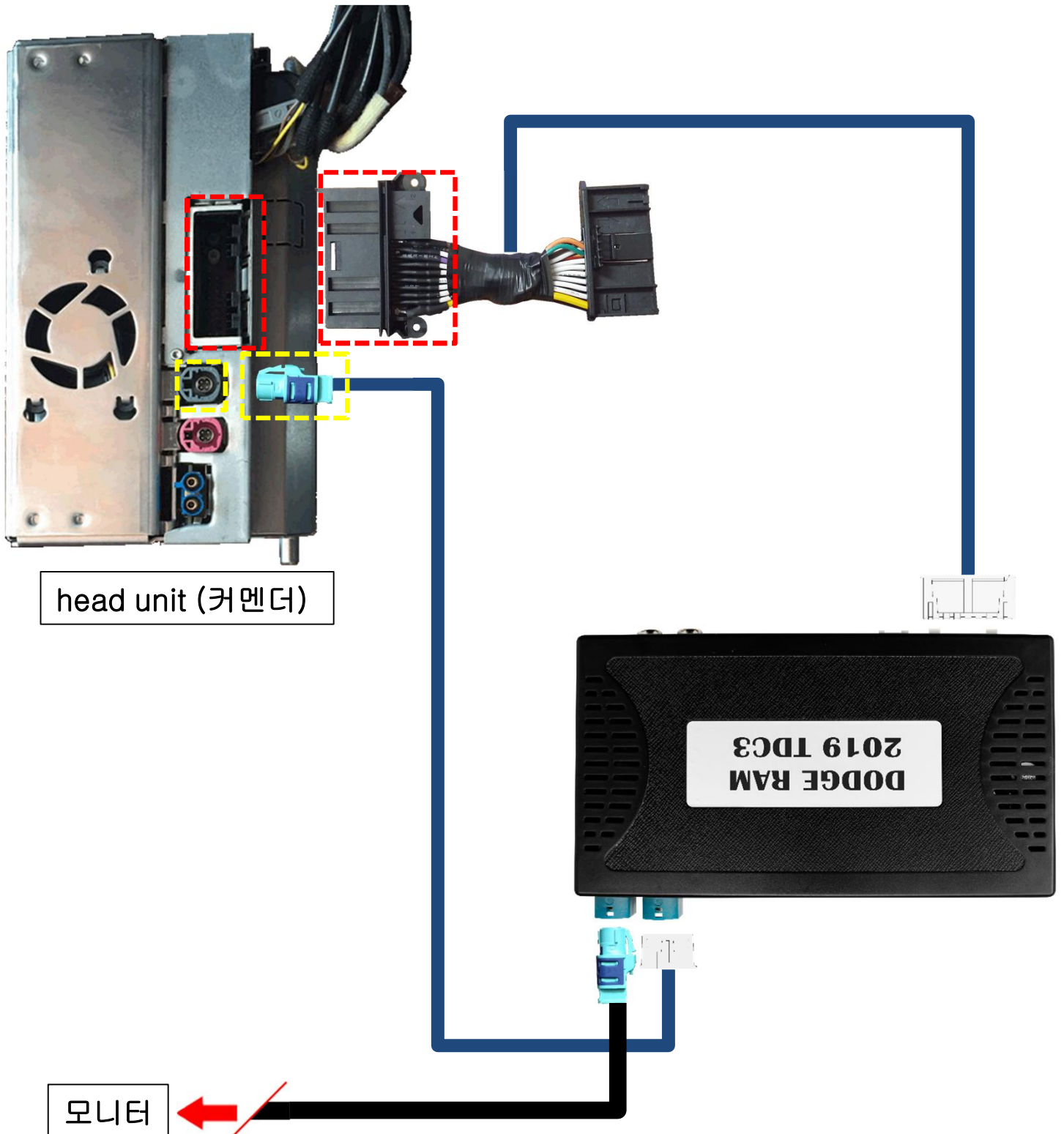


MENU	RearCam	REAR
Config	NAVI-RGB	AVM-VIDEO
Option	DVB-T(DMB)	AVM-DIGITAL
Image	DVD	Default
Screen	RearCam	
Parking	FrontCam	

- Select the RearCam you want to use from the above items.

# 10. Install Manual

## 5. Installation LVDS connection



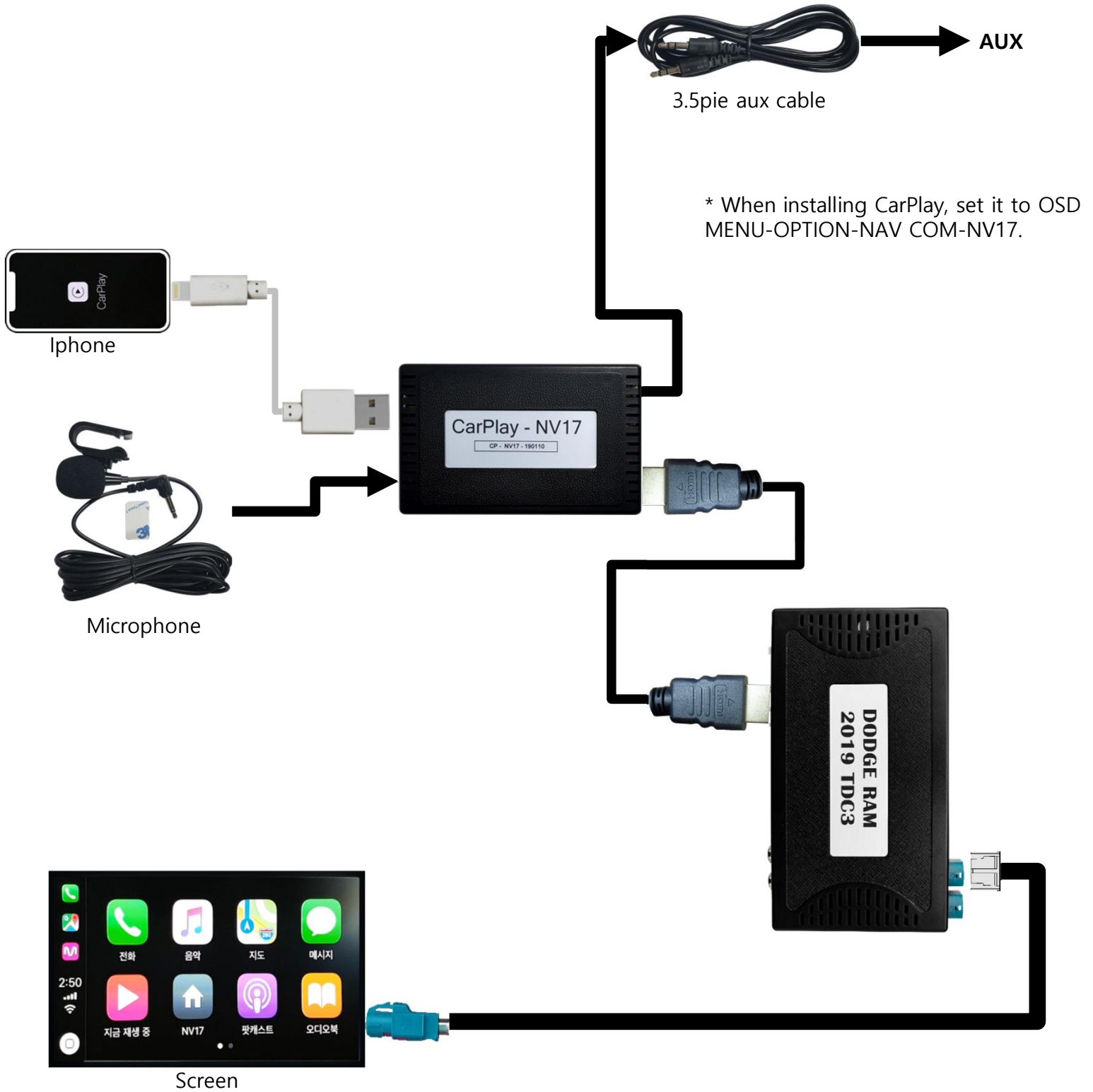
# 10. Install Manual

## 8. Installation CarPlay - KPLAY



# 10. Install Manual

## 9. Installation CarPlay – NV17



# 11. Q & A

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1. Check the LED status first when interface failure..
  - If there is no abnormality after the power is applied, the green LED flashes in units of 1 second.
  - If the red LED flashes for 1 second, there is no.
  - If the red LED is on continuously, the interface itself is bad.
  - If nothing turns on, check that the power and CAN signals are properly connected
2. Q : When the screen turns black  
A : LVDS cable itself is bad or bad contact.
3. If you find any symptoms with these symptoms, please contact your distributor.