

BENZ LVDS PAS (BENZ SQUARE) (VIDEO Interface)



MODEL	MB-PAS-140708
DATE	2015.09.16

Main Spec.

1. Input Spec. (MULTI VIDEO INTERFACE)

- 2 x A/V Input (External video source).
- 1 x CVBS(REAR CAMERA) Input. (Rear camera source)
- 1 x CVBS(FRONT CAMERA) Input. (Front camera source)
- 1 x Analog RGB Input (Navigation System output)
- 1 x GVIF Input. (Car Command System)

2. Output Spec.

- 2 x CVBS Output (Video out for Installing Headrest Monitor)
- 1 x Audio L/R Output.
- 1 x GVIF Output (LCD Operation)

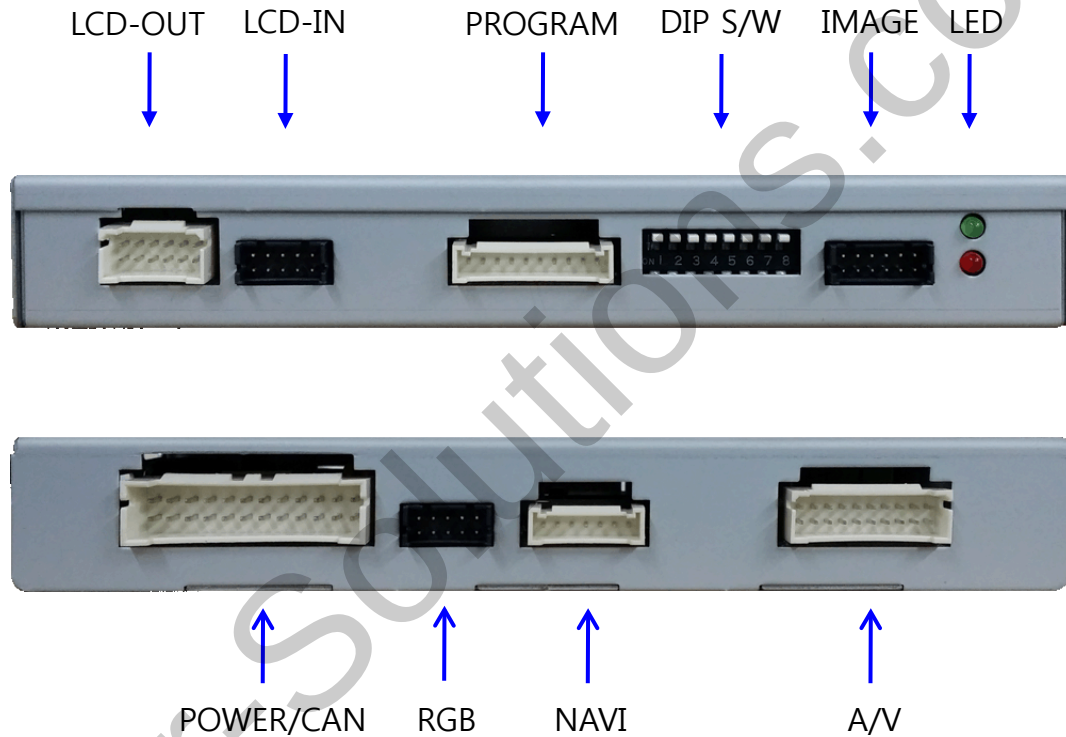
3. Power Spec.

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

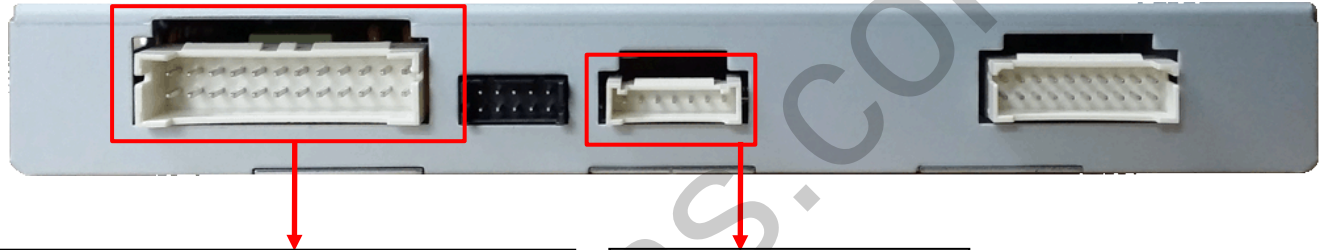
4. Switch Input mode

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

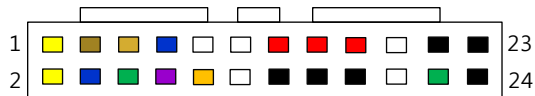
External Appearance



Connector Pin Assignment

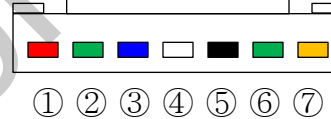


*POWER Connect



- | | |
|-------------------------------|---------------------|
| 1. Battery (Yellow) | 13. NAVI-VCC (Red) |
| 2. Battery (Yellow) | 14. GND (Black) |
| 3. Rear-Camera Detect (Brown) | 15. REAR-VCC (Red) |
| 4. Front-Camera Detect (Blue) | 16. GND(Black) |
| 5. CANL-IN(Brown) | 17. FRONT-VCC (Red) |
| 6. CANH-IN(Green) | 18. GND (Black) |
| 7. CANL-OUT(Blue) | 19. TX |
| 8. CANH-OUT(Violet) | 20. RX |
| 9. CAN-L(White) | 21. GND (Black) |
| 10. CAN-H(Orange) | 22. MODE (Green) |
| 11. NC | 23. GND (Black) |
| 12. NC | 24. GND (Black) |

*NAVI Connect



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

Product Composition



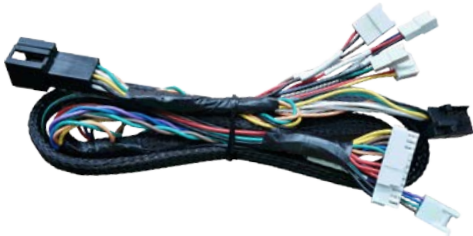
Interface 1 EA



A/V Cable 1 EA



LVDS-OUT Cable 1 EA



Power Cable 1 EA



RGB NAVI Cable 1 EA



OSD Board 1 EA



LVDS-IN Cable 1 EA

Product Composition Option



Option : Sub Board 1 EA



Option : RGB Cable 1 EA



Not for sale : HDMI Cable 1 EA

DIP S/W Setting

* ON : DOWN , OFF : UP

PIN	FUNCTION	DIP S/W Selection
1	NAVI	ON : Not Used OFF : Used
2	DMB	ON : Not Used OFF : Used
3	DVD	ON : Not Used OFF : Used
4	HDMI	ON : Not Used OFF : Used
5	CAR type SEL	Right Picture
6		
7		
8		

* DIP S/W Example



W204, C class 5" size



W204, C class 7" size



W212, E class 5.8" size



W212, E class 7" size



X204, GLK class 7" size



W221, S class 8" size

I-DRIVE Control

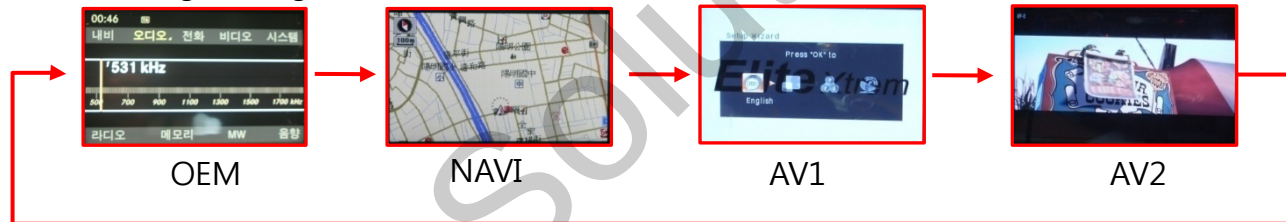
I-Drive Control : : C, E, GLK class



<On DTV Mode >
Push Long : SCAN
Push Short : Channel UP

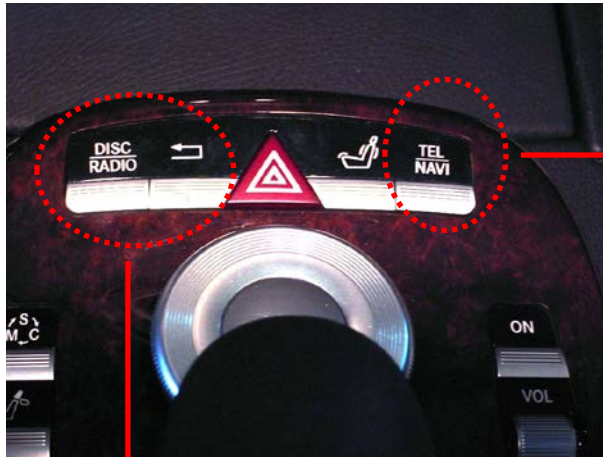
Push Short : Channel DOWN

Push Long : Change the mode



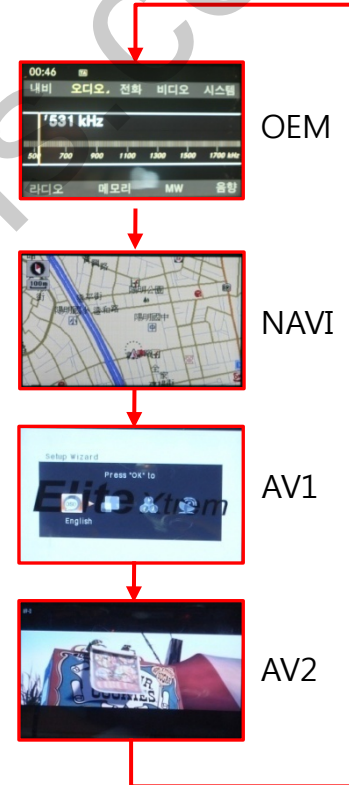
I-DRIVE Control

I-Drive Control : S class



Push Long : Change Mode

Push Short : Back to OEM Mode



I-DRIVE Control

DVD UI control

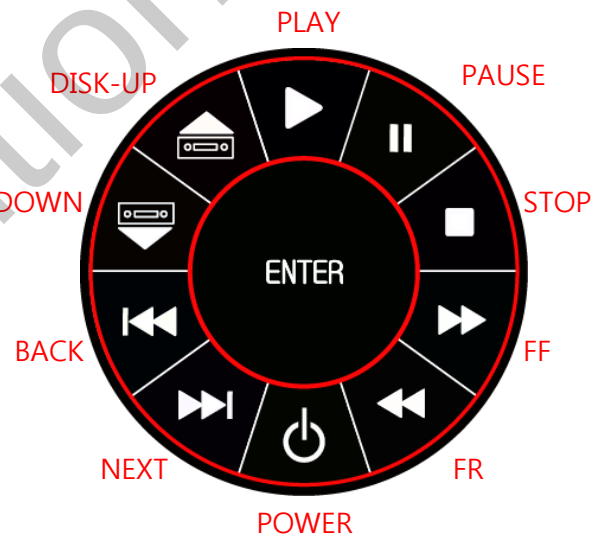


<On DVD Mode >

Icon image Move to right

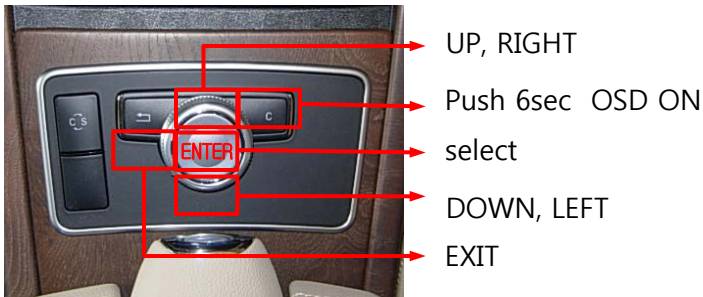
Push Long : DVD UI ON, Push Short : Enter the Icon

Icon image Move to right



OSD(On Screen Display) Control

OSD control



★	Push 6sec OSD ON Push short 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	Config	NAVI
Config	NAVI-RGB	KD900(WVGA)
Option	NAVI-AV	Default
Image	DVD	ELT-980XU Slim
Screen	DVB-T(IMB)	ELT-DVBT20
Parking	BlackBox	Default
First Menu	Second Menu	Third Menu

OSD(On Screen Display) Control

First Menu	Second Menu	Third Menu	Action
Option	RearCam-Type	OEM	Original Camera
		ExtDevice	Use aftermarket Rear camera
	RearCam-Power	ON	Rear camera get +12V consistently
		AUTO	Rear camera get +12V when reverse gear on
		OFF	Shut out the power supply.
	FrontCam-Type	OEM	Original Camera
		ExtDevice	Use aftermarket Front camera
	FrontCam-Power	ON	Front camera get +12V consistently
		AUTO	Front camera get +12V when reverse gear on
		OFF	Shut out the power supply.
	RearCam-RcvOpt	ON	Show Frontcam 25sec after rear mode.
		OFF	Default
	Reset	Excute	Option Menu all Reset

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 >>



<< Saturation >>



<< Contrast >>

OSD(On Screen Display) Control

OSD Setting- Screen Mode

- Horizontal
- Vertical
- Scaler X Up
- Scaler X Down
- Scaler Y Up
- Scaler Y Down

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

OSD(On Screen Display) Control

OSD Control- Parking Line On/Off

MENU	Parking	REAR
Config	OPS Display	On
Option	Line Display	On
Image	Horizontal	50
Screen	Vertical	50
Parking	Space	0

MENU	Parking	REAR
Config	OPS Display	On
Option	Line Display	On
Image	Horizontal	50
Screen	Vertical	50
Parking	Space	0

MENU	Parking	REAR
Config	OPS Display	On Off
Option	Line Display	On
Image	Horizontal	50
Screen	Vertical	50
Parking	Space	0

MENU	Parking	REAR
Config	OPS Display	On Off
Option	Line Display	On
Image	Horizontal	50
Screen	Vertical	50
Parking	Space	0

Parking Line ON

Parking Line OFF



OSD(On Screen Display) Control

OSD Control- Parking Sensor Display on/off

MENU	Parking	REAR
Config	OPS Display	On
Option	Line Display	On
Image	Horizontal	50
Screen	Vertical	50
Parking	Space	0

MENU	Parking	REAR
Config	OPS Display	On
Option	Line Display	On
Image	Horizontal	50
Screen	Vertical	50
Parking	Space	0

MENU	Parking	REAR
Config	OPS Display	On Off
Option	Line Display	On
Image	Horizontal	50
Screen	Vertical	50
Parking	Space	0

MENU	Parking	REAR
Config	OPS Display	On Off
Option	Line Display	On
Image	Horizontal	50
Screen	Vertical	50
Parking	Space	0

OPS ON

OPS OFF



OSD(On Screen Display) Control

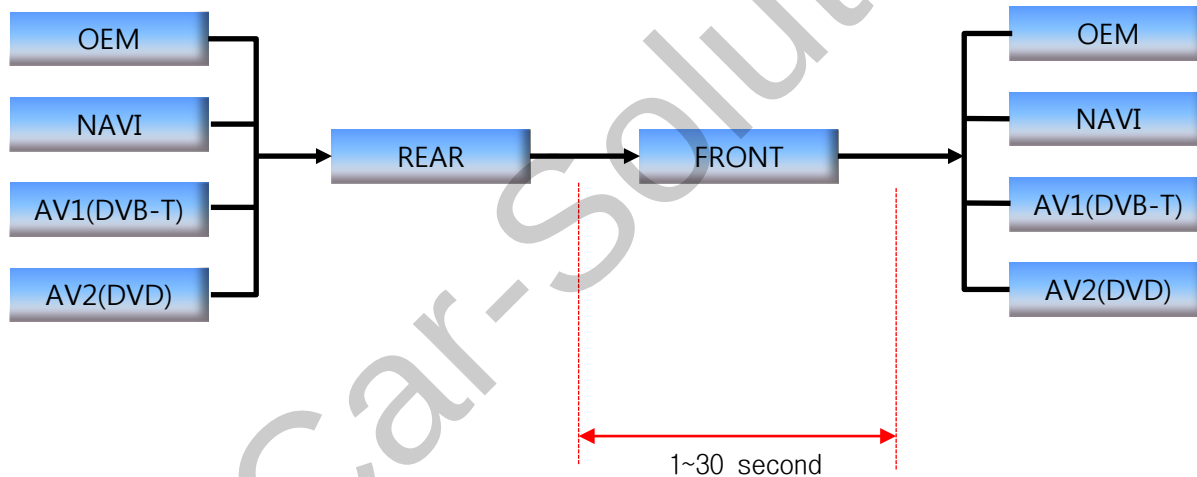
OSD Setting - Front Camera Auto Mode

- Option -> RearCam-RcvOpt -> 0 second = RearCam-RcvOpt menu OFF

1~30 second = RearCam-RcvOpt menu ON & time control

MENU	Option / RearCam-RcvOpt	REAR
Config	FrontCam-Det	ExtWire
Option	RearCam-RcvOpt	0s
Image	AV Out	USER
Screen	Reset	Execute Cancel
Parking		

MENU	Option / RearCam-RcvOpt	REAR
Config	FrontCam-Det	ExtWire
Option	RearCam-RcvOpt	30s
Image	AV Out	USER
Screen	Reset	Execute Cancel
Parking		



OSD(On Screen Display) Control

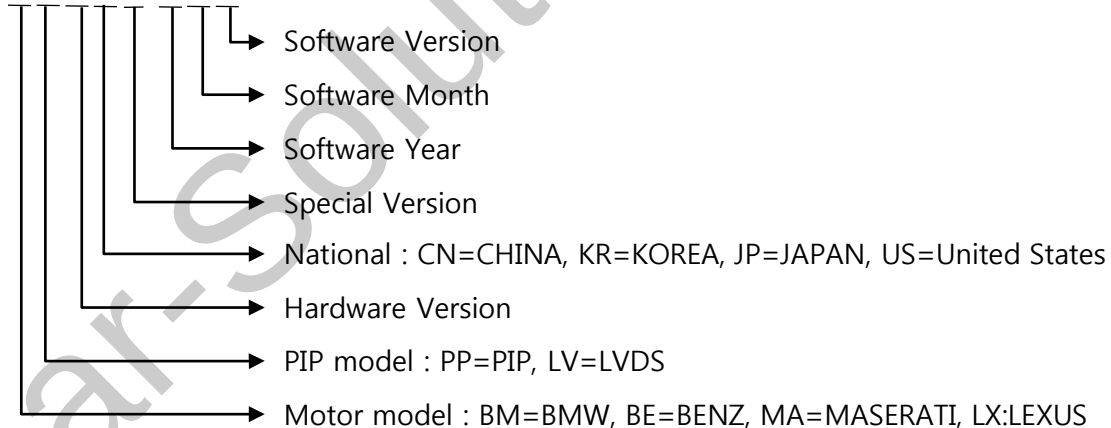
OSD Setting - Utility Mode

MENU	Utility / Factory Reset	REAR
OSD	Factory Reset	Execute Cancel
Utility	Version	BEPP06SGX-130950

- Factory Reset : Execute - Reset All (Setting Default)
- Version : FW Version

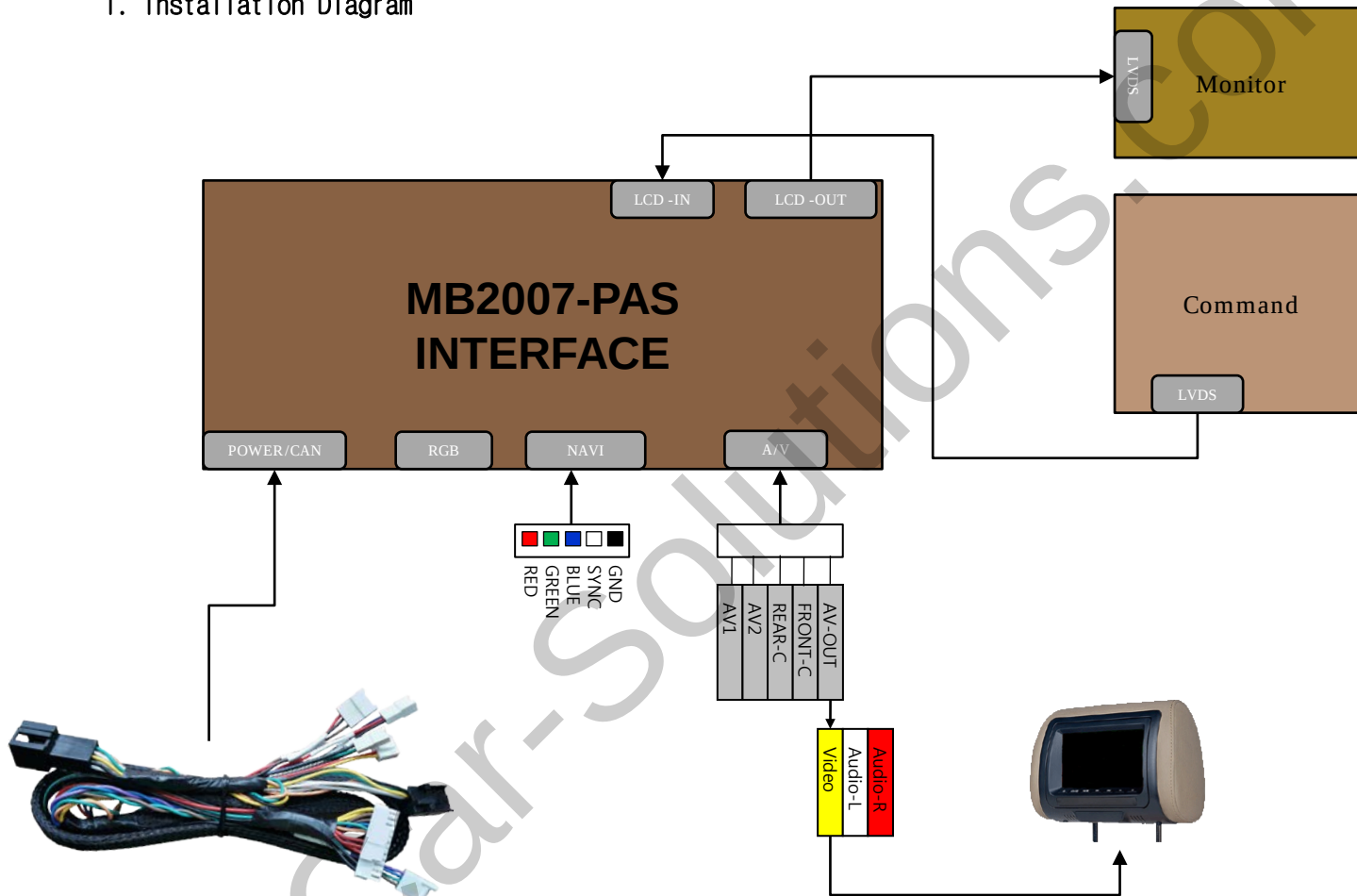
Finish update FW, check the FW version

Last Source : BEPP06SGX-130950



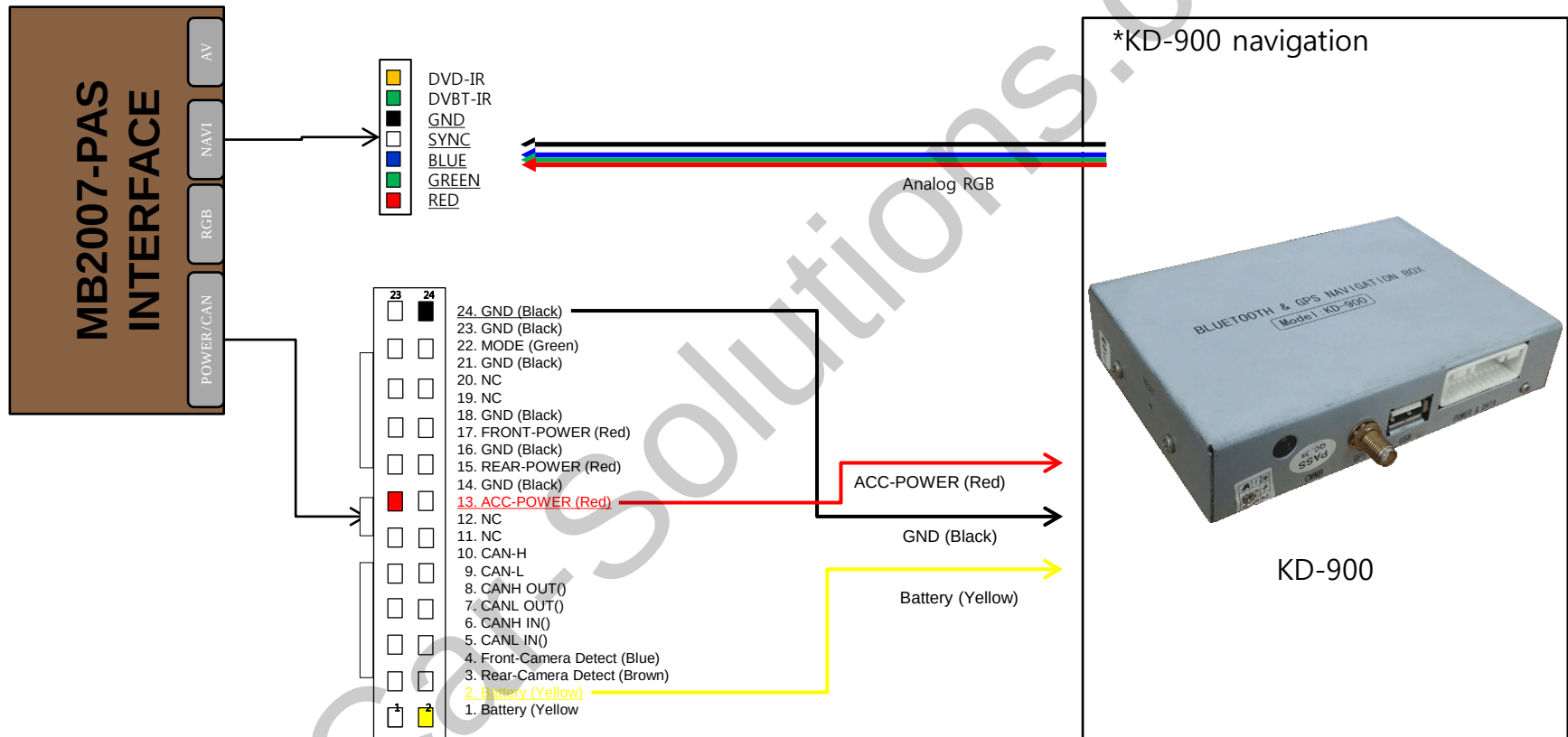
Install Manual

1. Installation Diagram



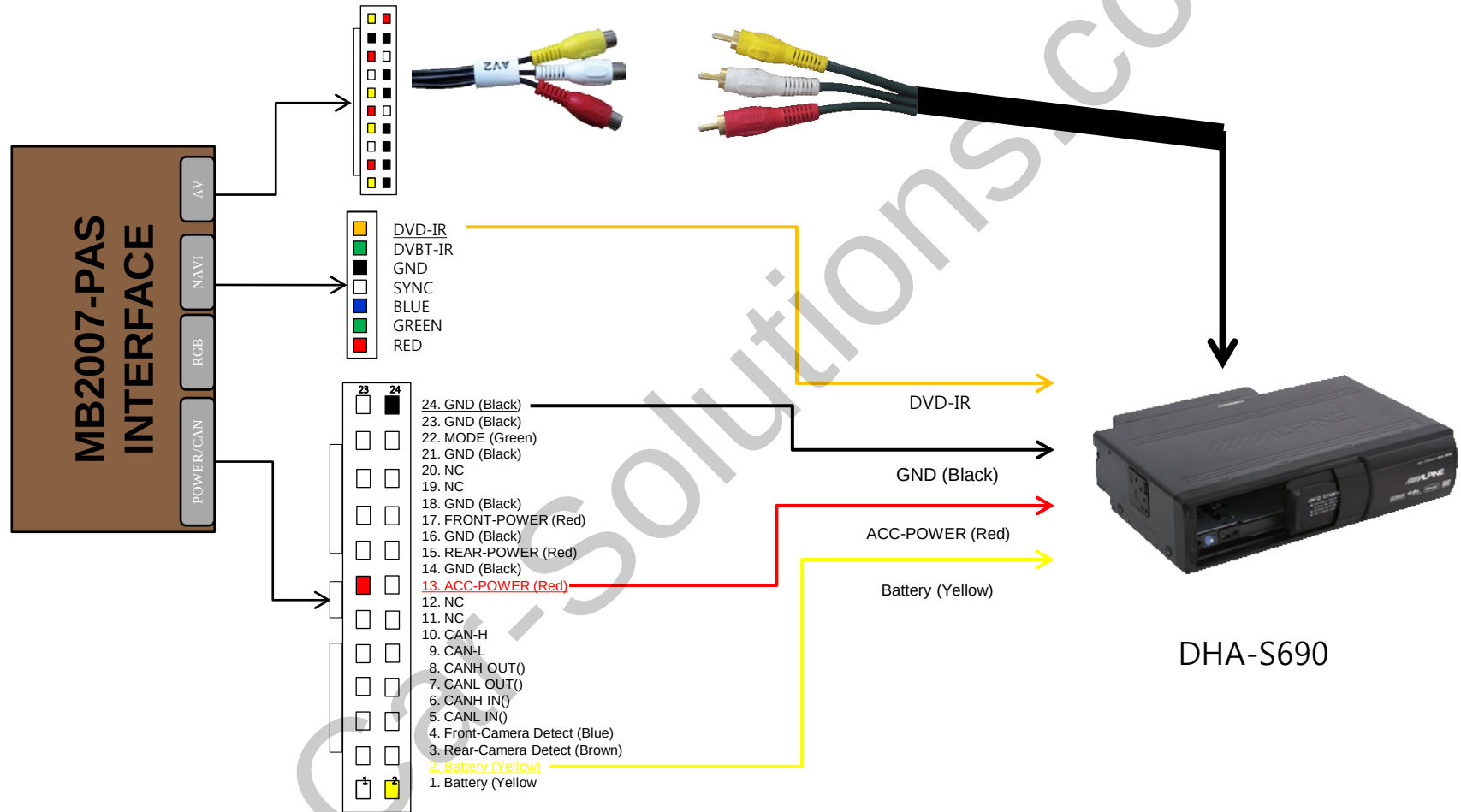
Install Manual

2. Installation Navigation Connection



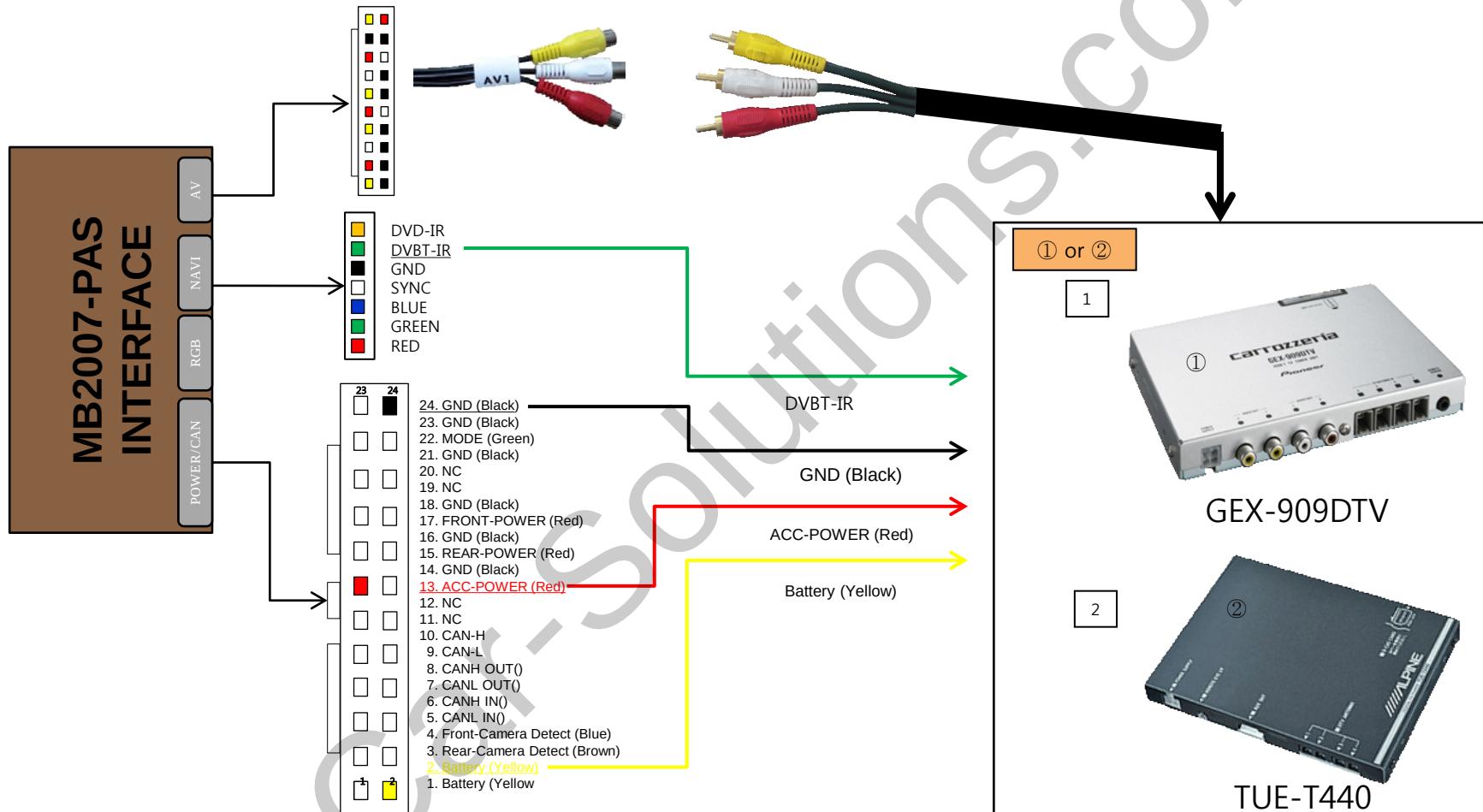
Install Manual

3. Installation DVD Remote Control Connection



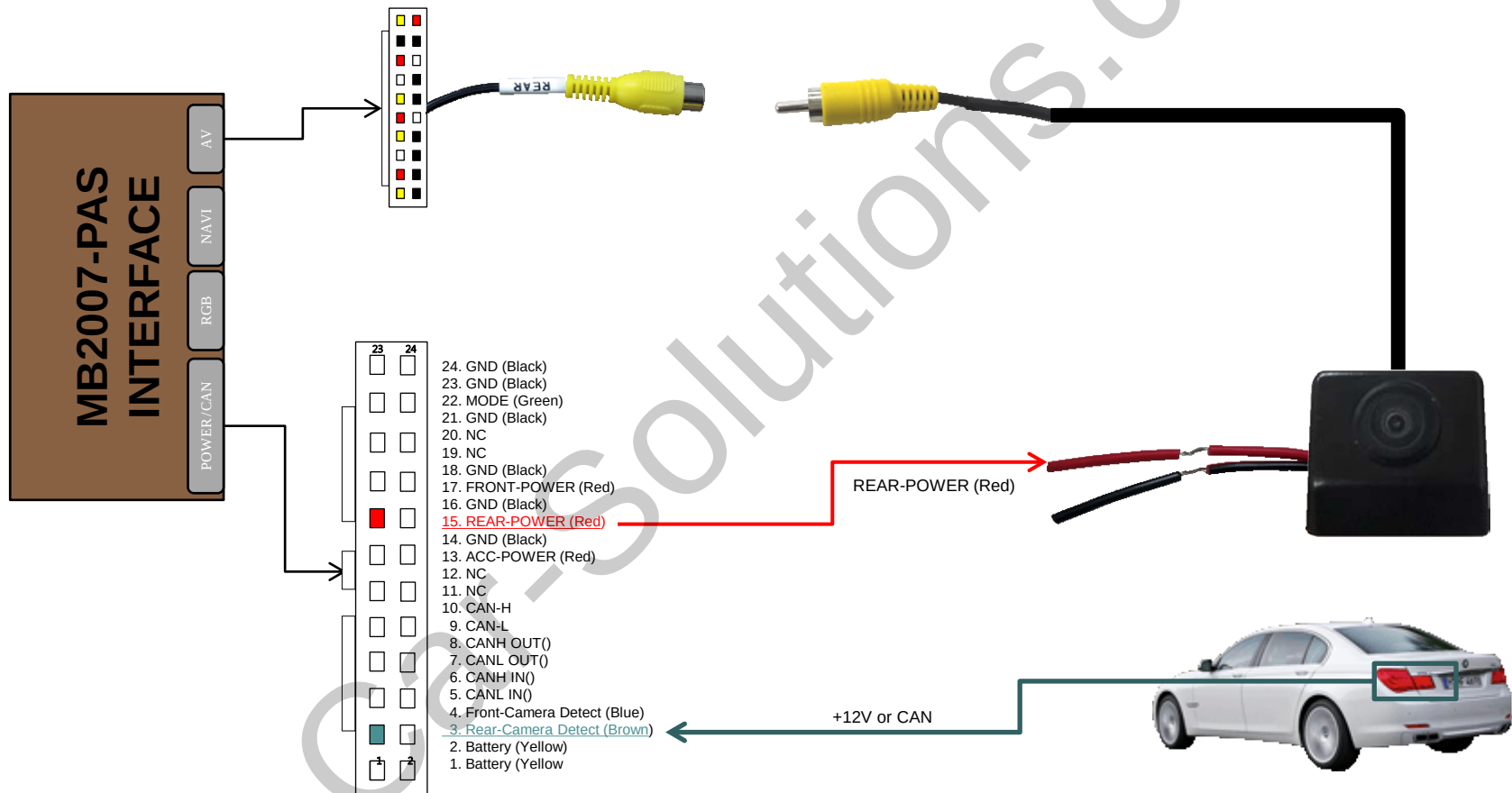
Install Manual

4. Installation DVB-T Remote Control Connection



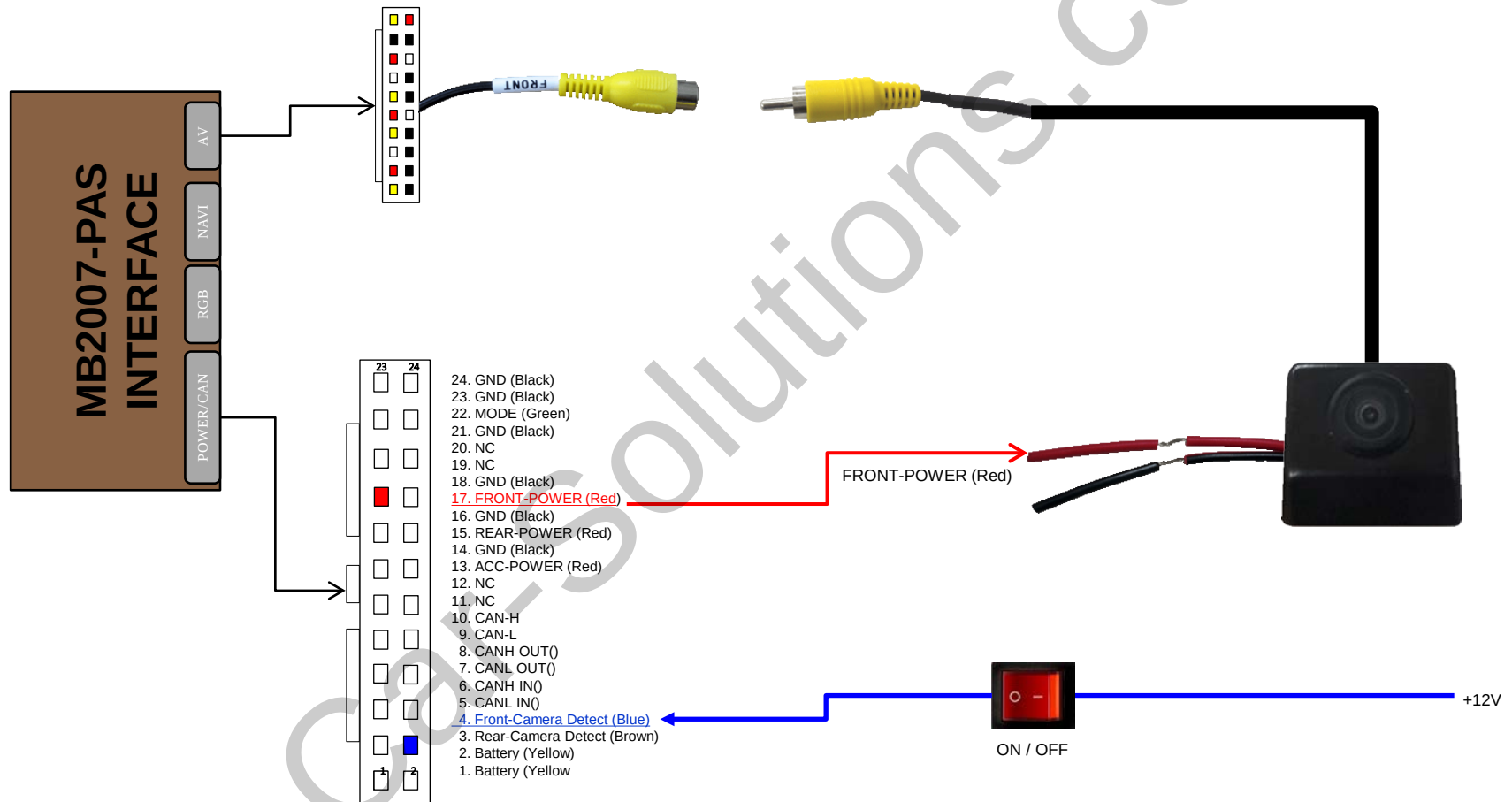
Install Manual

5. Installation External Reverse(Rear) Camera Connection



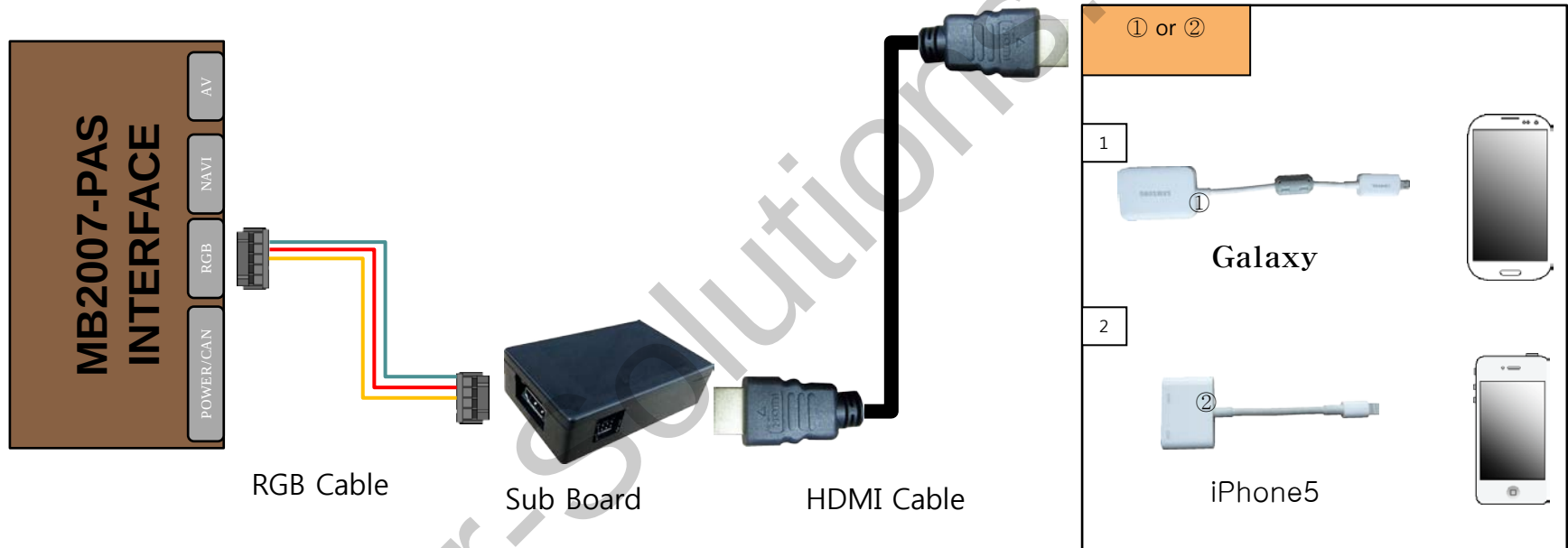
Install Manual

6. Installation External Front Camera Connection



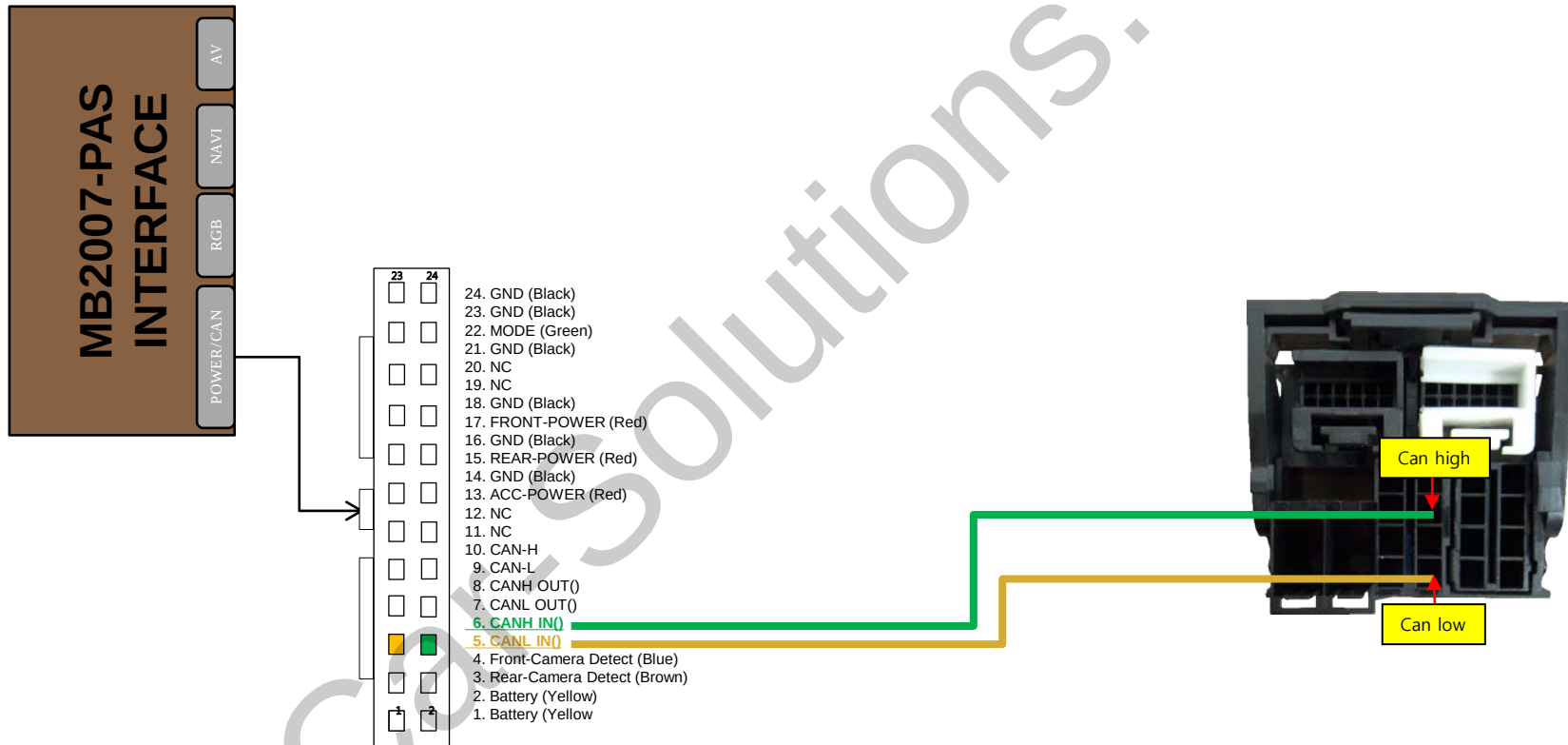
Install Manual

7. Installation External MHL wireless



Install Manual

8. Installation Body-CAN(PAS Line using)



Q & A



1. If Interface has a problem, Please check LED.

- ACC on (12v), If Interface does not have a problem; GREEN LED is blinking every 1 sec..
- RED LED is turn on (not blinking), Interface has a problem.
- RED LED is turn off every 1 sec, there is no input.
- RED LED and GREEN LED both are not turn on, check the CAN or ACC connection.

2. Q : LCD screen black

A : LVDS Cable problem or, connection problem.

3. When DTV or DVD mode, cannot control with I-Drive

- Check IR cable, and DTV or DVD device' s ground cable and Interface ground cable join together with using extra cable.
- Check device in OSD menu