

Land Rover 2014 (**Capacitive touch monitor**)

- FREELANDER 2/ EVOQUE/ RANGE ROVER 2014 -
- JAGUAR XF / XJL and DISCOVERY 4-



FREELANDER 2

DISCOVERY 4

RANGE ROVER EVOQUE

RANGE ROVER SPORT

ALL-NEW RANGE ROVER

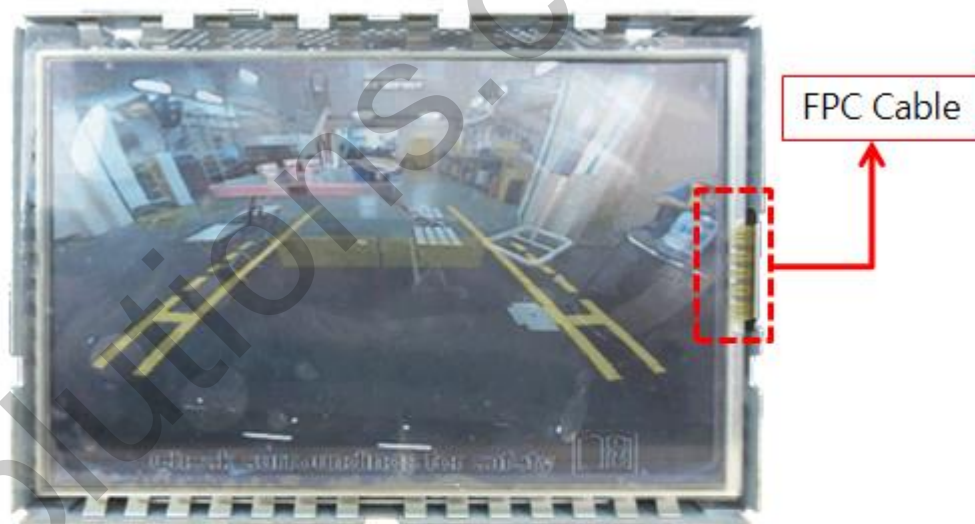
Manual released 2014. 12. 03

Serviceable Model



NEW MODEL(2014 year ~)

Work!



OLD MODEL(~ 2013 year)

Not Work!



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)

2. Output Spec.

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

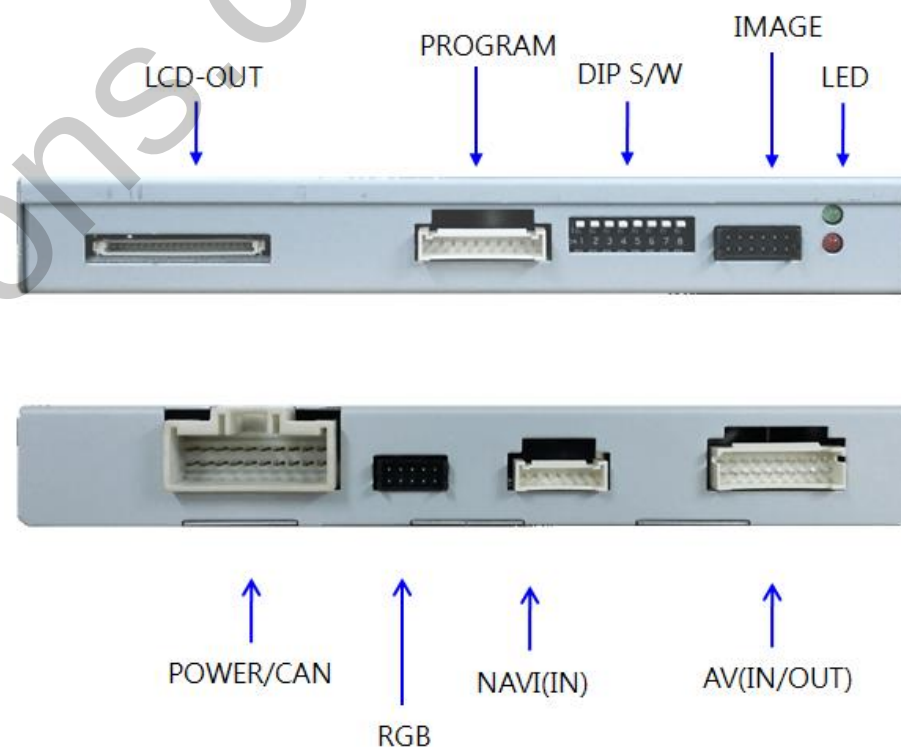
About Interface

- Dimension

136mm * 83mm * 21mm



- External Appearance



* This can change under manufacturer's circumstance

Connector Pin Assignment



*POWER Connect



- | | |
|---------------------|-----------------------|
| 1. BATTERY (Yellow) | 11. REAR-DET (Brown) |
| 2. BATTERY (Yellow) | 12. FRONT -DET (Blue) |
| 3. CAN-L (GREEN) | 13. FRONT -ACC (Red) |
| 4. CAN-H (Orange) | 14. GND (Black) |
| 5. MODE (GREEN) | 15. UART_RX (Purple) |
| 6. GND (Black) | 16. UART_TX (White) |
| 7. ACC (Red) | 17. IR-DMB (GREEN) |
| 8. GND (Black) | 18. IR-DVD (Orange) |
| 9. REAR-ACC (Red) | 19. GND (Black) |
| 10. GND (Black) | 20. GND (Black) |

*NAVI Connect

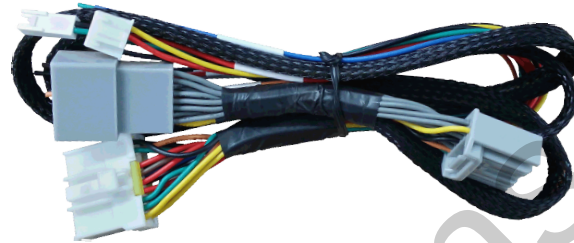


- | |
|-----------------------------|
| ① R DATA (Red) |
| ② G DATA (Green) |
| ③ B DATA (Blue) |
| ④ SYNC (White) |
| ⑤ GND (Black) |
| ⑥ DMB IR (Green) → UART TX |
| ⑦ DVD IR (Orange) → UART RX |

Product Composition



Interface Board 1 EA



Power Cable 1 EA



RGB Cable 1 EA



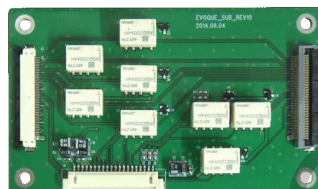
AV Cable 1 EA



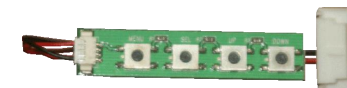
LVDS Cable(800mm) 1 EA



FFC Cable(100mm) 1 EA



SUB-BOARD 1 EA



OSD Keypad 1 EA

Product Composition (HDMI Input Option)



Option : Sub Board 1 EA

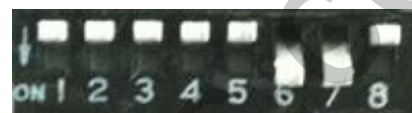


Option : Cable 1 EA

DIP S/W Setting

※ ON : DOWN , OFF : UP

PIN	FUNCTION	DIP S/W Selection
1	RGB INPUT MUTE	ON : Skipping RGB Mode OFF : RGB Display
2	CVBS1 MUTE	ON : Skipping AV1 OFF : AV1 Display
3	CVBS2 MUTE	ON : Skipping AV2 OFF : AV2 Display
4	HDMI MUTE	ON : Skipping HDMI OFF : HDMI Display
5	CAR Model	RIGHT Photo
6		
7		
8		



JAGUAR XJL



JAGUAR XF



FREELANDER 2



FREELANDER 2 2015



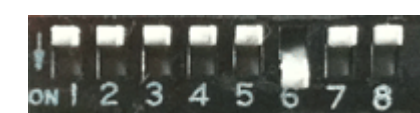
DISCOVERY 4



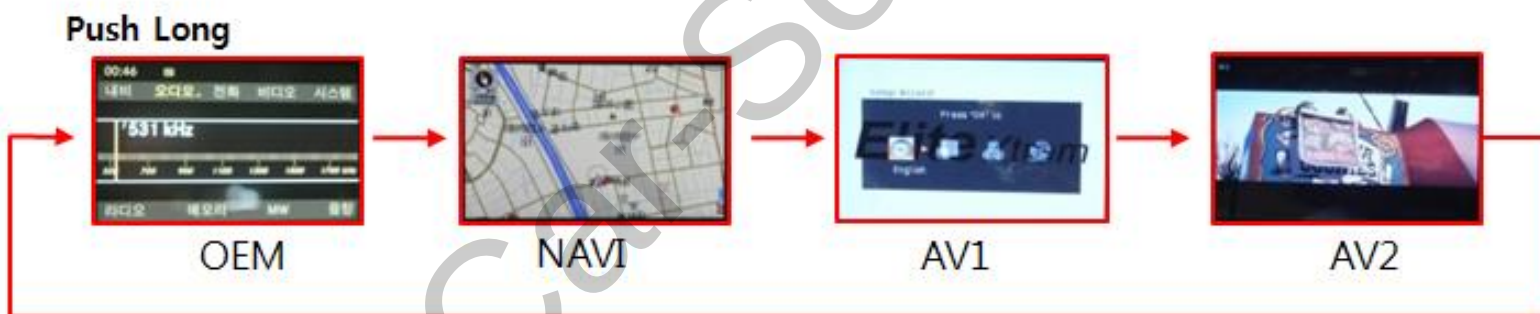
DISCOVERY 4 2015

RANGE ROVER EVOQUE
2013RANGE ROVER EVOQUE
2014

RANGE ROVER 2014

Range Rover DUAL VIEW
(VOGUE)

I-DRIVE CONTROL - RANGE ROVER 2014



I-DRIVE CONTROL - EVOQUE (1)



Push Long

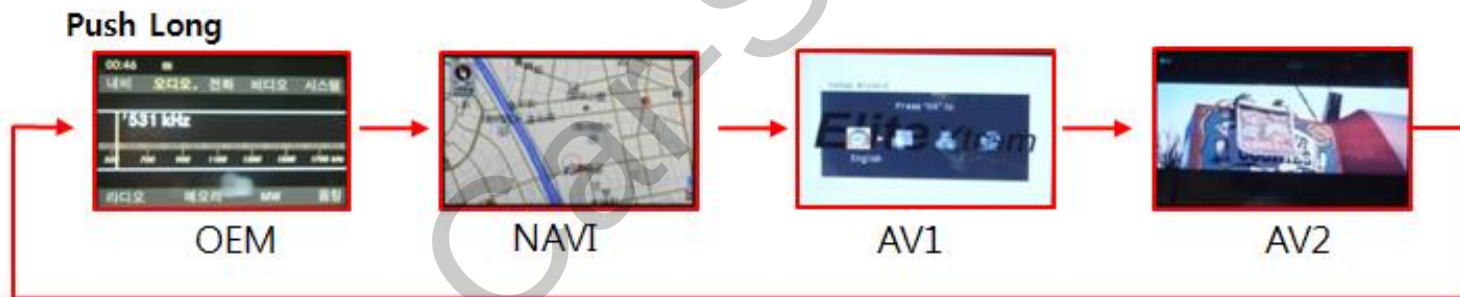


I-DRIVE CONTROL - EVOQUE (2)



mode change

Return OEM Display



I-DRIVE CONTROL – FREELANDER 2



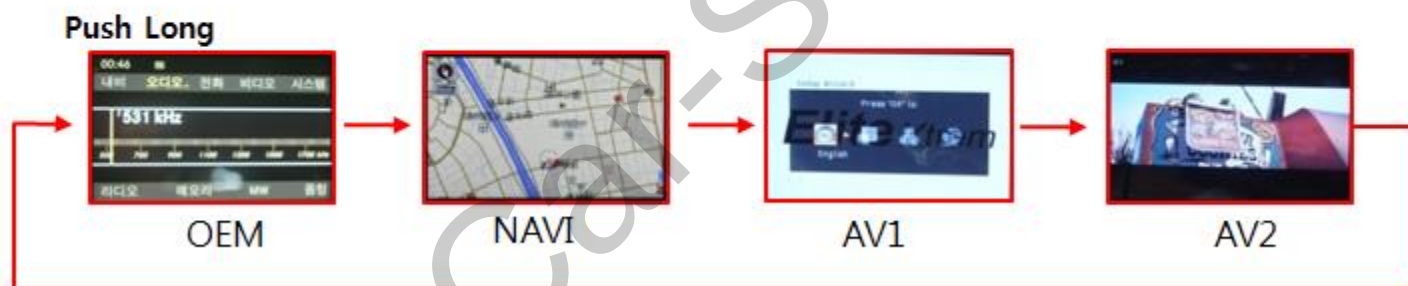
I-DRIVE CONTROL – JAGUAR XF



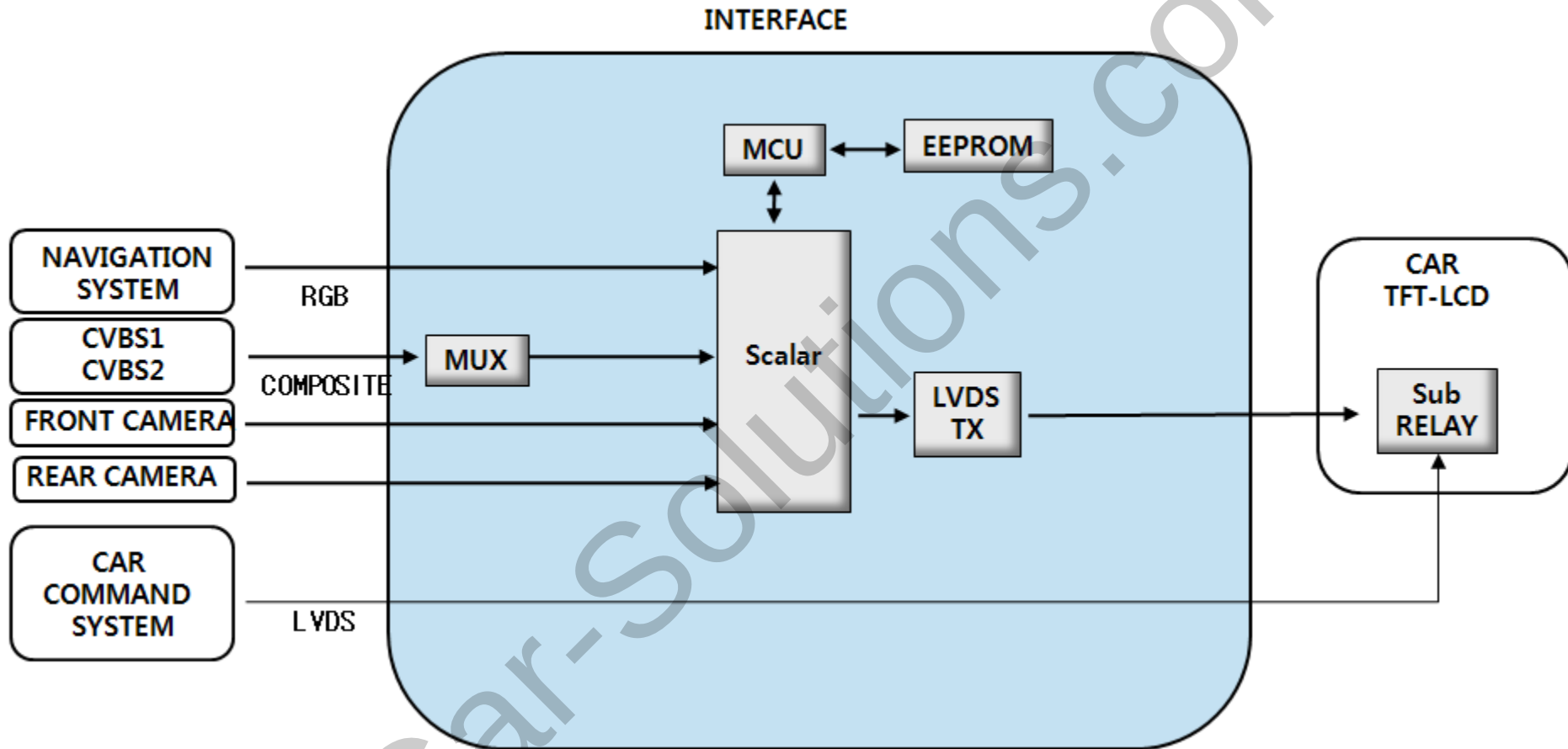
Push Long – Mode Change



I-DRIVE CONTROL - JAGUAR XJL

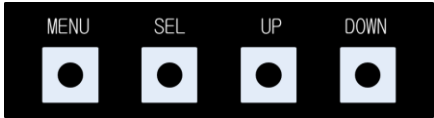


Block Diagram



OSD CONTROL

OSD Control Board



MENU	Push -> OSD menu On/Off
SEL	Item Selection, Value Selection
UP	Item Up / Increase selected value
DOWN	Item Down / Decrease selected value

Mode State		
MENU	Config	
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 MENU

First Menu	Second Menu	Third Menu	Action	ELT-980XU Slim	AMPIRE DVX-101
Config	NAVI-RGB	GI4000	Selection Korea 480*234		
		GI8000	Selection Korea 800*480		
		GI8000 3G	Selection Korea 800*480		
		PANASONIC	Selection Taiwan 480*234		
		PT-GPS800A	Selection China 480*234		
		KD900(WVGA)	Selection China 800*480	SANYO	NECVOX
		KD900(WQVGA)	Selection China 480*234		
		PURENAV18	Selection Taiwan 480*234		
		SINGAPORE	Selection Singapore 480*234		
	NAVI-AV				
	DVD	ELT-980XU Slim	Selection Europe		
		LCKT	Selection China		
		SANYO	Selection China		
		NECBOX DVA-3206	Selection China		
		AMPIRE DVX-101	Selection Singapore		
		PIONEER	Selection Japan		

OSD MENU

First Menu	Second Menu	Third Menu	Action		DVBT55HD	Pioneer
Config	DVB-T(DMB)	ELT-DVBT20	Selection Europe			
		NET-770	Selection Korea			
		MEDIALIFE	Selection Korea			
		PANASONIC	Selection Japan			
		PIONEER	Selection Japan			
		GEX-DTV	Selection Japan		DVB-T2010HD	
		PORTUGAL	Selection Europe			
		DVB-T20010HD	Selection Europe			
		DVBT55-HD	Selection Europe			
	CMMB-ZW	Selection China				
Reset	EXCUTE	Config Menu all Reset				
LCKT	PIONEER	ELT-DVBT20	Portugal	CMMB-ZW	GEX-DTV	GEX-DTV
						

OSD Menu

MENU	Option	NAVI
Config	RearCam-Type	ExtDevice
Option	RearCam-Power	Off
Image	FrontCam-Type	ExtDevice
Screen	FrontCam-Power	Off
Parking	Safe Mode	Off

First Menu	Second Menu	Third Menu	Action
Option	RearCam – Type	OEM	Original Rear 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 Front 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 Menu

► 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(DTV),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

OSD Menu

► OSD Setting – Utility Mode

MENU	Utility	NAVI
Image	Reset All	Execute Cancel
OSD	Info	System Version = 01.01
Parking		
Config		
Utility		

- Reset All : Initialization
- Info: Software version.

► OSD Setting – Utility Mode

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

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

OSD Menu

► OSD Setting – Parking Mode

MENU	Config	FRONT
Config	NAVI-RGB	WPS200_VVGA
Option	NAVI-AV	Default
Image	DVD	GB-DAB
Screen	DVB-T(IMB)	GB-DVBT
Parking	BlackBox	Default

MENU	Parking	REAR
Config	Display	Off
Option	Horizontal	25
Image	Vertical	50
Screen	Space	50
Parking	Transparency	40

MENU	Parking / Display	REAR
Config	Display	On Off
Option	Horizontal	25
Image	Vertical	50
Screen	Space	50
Parking	Transparency	40

MENU	Parking / Display	REAR
Config	Display	On Off
Option	Horizontal	25
Image	Vertical	50
Screen	Space	50
Parking	Transparency	40

Parking line "ON"



Parking line "OFF"



OSD Menu

► OSD Setting – 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 icon ON



OPS icon Off



OSD Menu

- ▶ PAS – Parking line Compare with original one



Evoque original image



Inteface PAS image

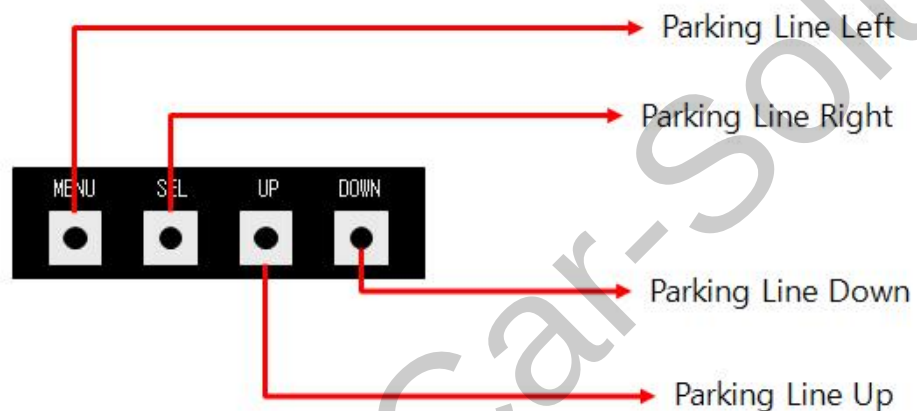
OPS

OSD Menu

► OSD Control Board

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



* Parking Line can move to Left/Right/Up/Down



Parking Line Left



Parking Line Right



Parking Line Down



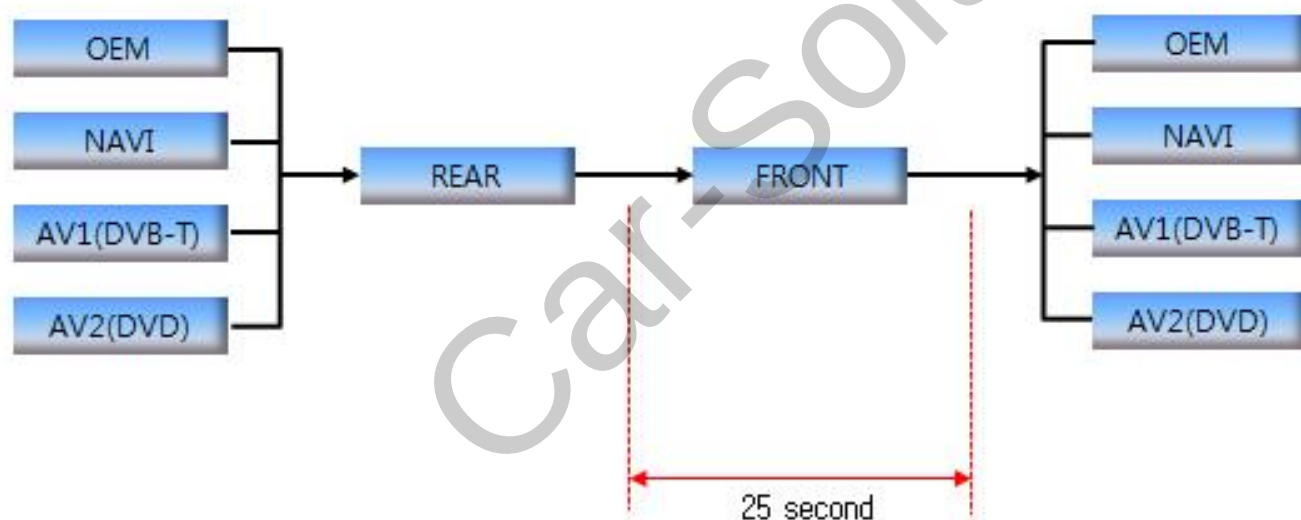
Parking Line Up

OSD(On Screen Display) Control

OSD control - Front camera Auto Mode

-Option -> RearCam-RcvOpt -> On setting

MENU	Option / RearCam-RcvOpt		REAR
Config	FrontCam-Det	ExtWire	
Option	Safe Mode	Off	
Image	RearCam-RcvOpt	On	
Screen	AV Out	AV1	
Parking	Reset	Execute Cancel	



OSD(On Screen Display) Control

OSD Control - Utility Mode

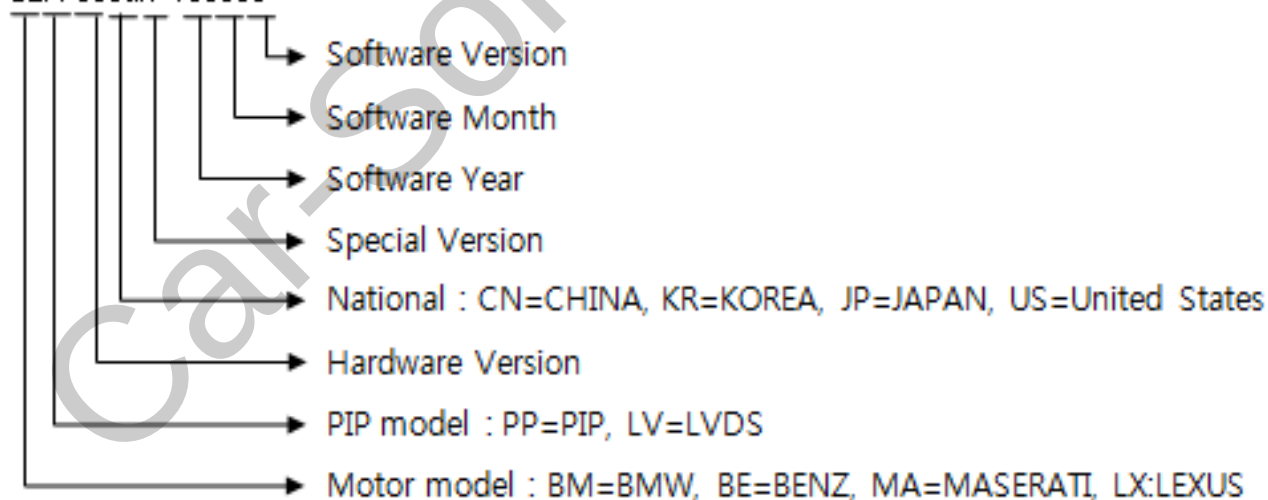
MENU	Utility / Factory Reset	REAR
OSD	Factory Reset	Execute Cancel
Utility	Version	BEPP06SGX-130950

- Reset All : Setting default

- Info : Software version

Finish upgrade, check the software version.

Last Source : BEPP06SGX-130950



FAQ

1. If Interface has a problem, Please check LED.
 - After acc turn on, 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 not turning on, there is no input device.
 - **RED** LED and **GREEN** LED both are not turn on, check to power cable.
2. When monitor changed to Orange color.
 - LVDS cable contact problem or cable 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