Audi-4G-PAS

- MODEL : AD-4G-PAS-150211

- DATE : 2020.02.09

GU ELECTRONIC

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1. Main Spec.

1. Input Spec. (MULTI VIDEO INTERFACE)
   - 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.
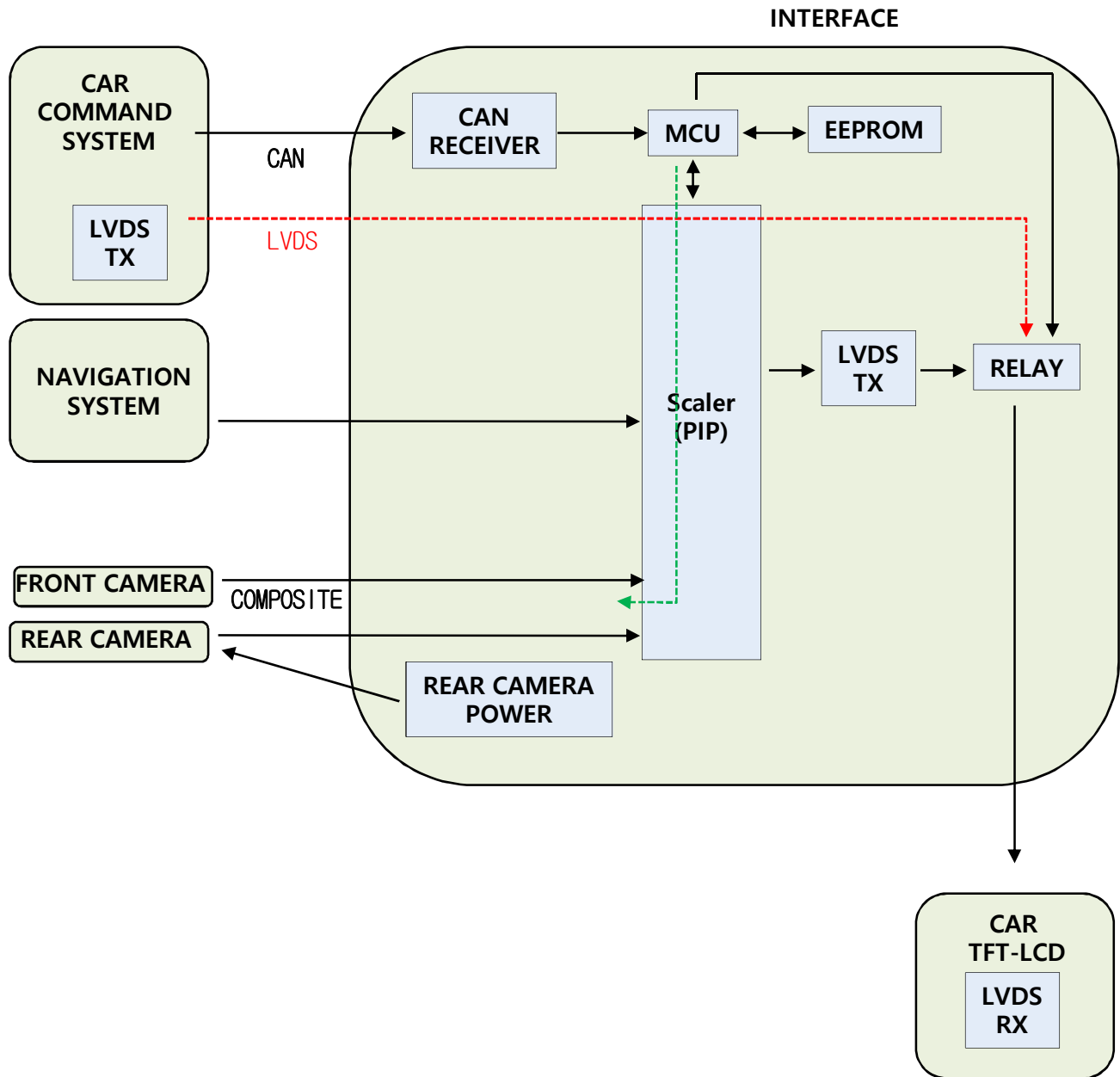   - 1 x LVDS Output (LCD Operation)

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
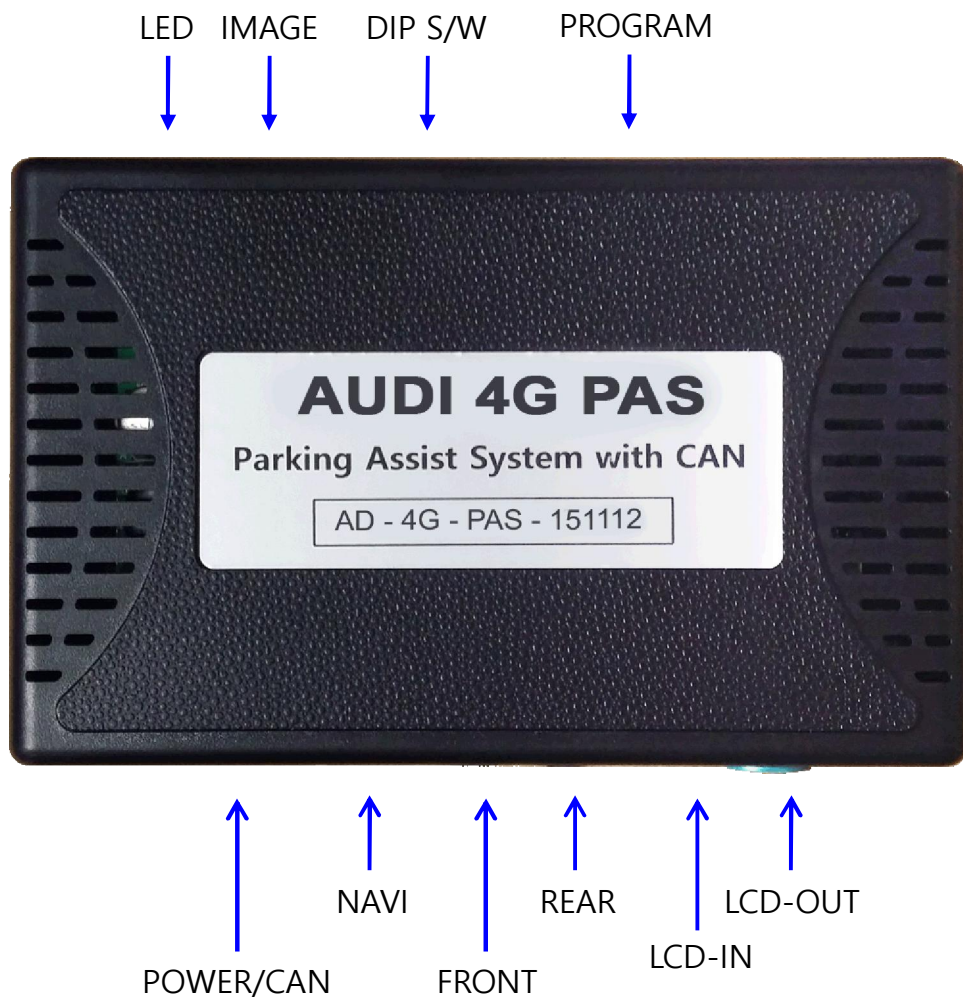   - By button on the Commander in the car via CAN

2. Block Diagram

INTERFACE

CAR COMMAND SYSTEM
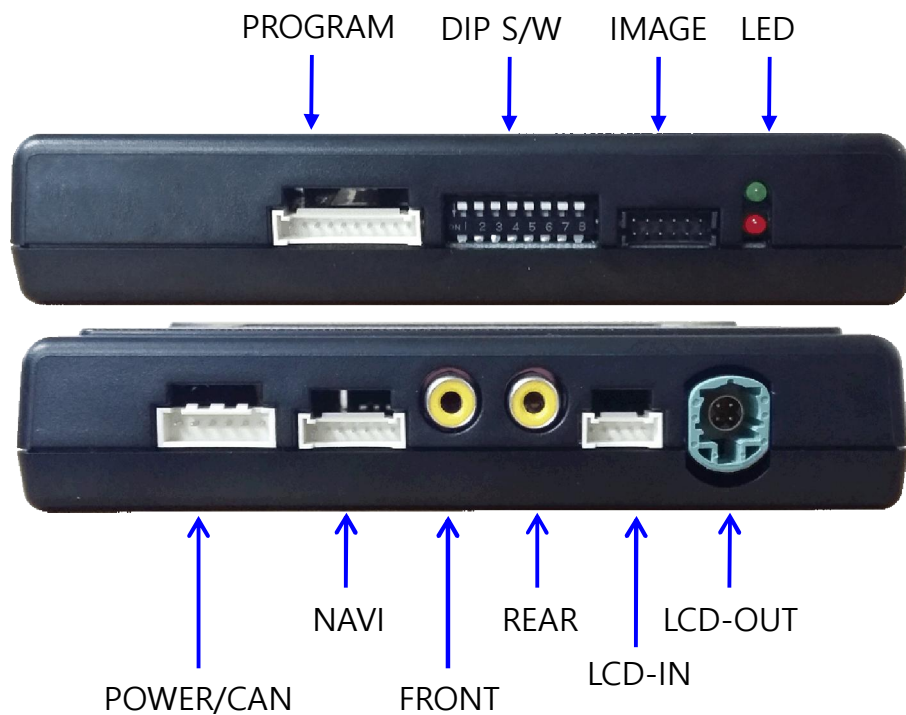
CAN

LVDS TX

LVDS

NAVIGATION SYSTEM

FRONT CAMERA

COMPOSITE

REAR CAMERA

REAR CAMERA POWER

CAN RECEIVER

MCU

EEPROM

Scaler (PIP)

LVDS TX

RELAY

CAR TFT-LCD

LVDS RX

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3. Dimension

136.5mm * 87.5mm * 27mm

136.5 mm

27mm

87.5mm

AUDI 4G PAS
Parking Assist System with CAN

AD - 4G - PAS - 161112

* This can change under manufacturer's circumstance

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4. External Appearance

LED   IMAGE   DIP S/W   PROGRAM

AUDI 4G PAS

Parking Assist System with CAN

AD - 4G - PAS - 151112

NAVI   REAR   LCD-OUT

LCD-IN

POWER/CAN   FRONT

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4. External Appearance

PROGRAM   DIP S/W   IMAGE   LED

NAVI   REAR   LCD-OUT

LCD-IN

POWER/CAN   FRONT

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5. Connector Pin Assignment

*POWER Connect

① ② ③ ④ ⑤ ⑥

① ACC (Yellow)
② REAR_POWER (Red)
③ CAN-HIGH (Orange)
④ CAN-LOW (Green)
⑤ MMI(Blue)
⑥ 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 NC
⑦ +5V
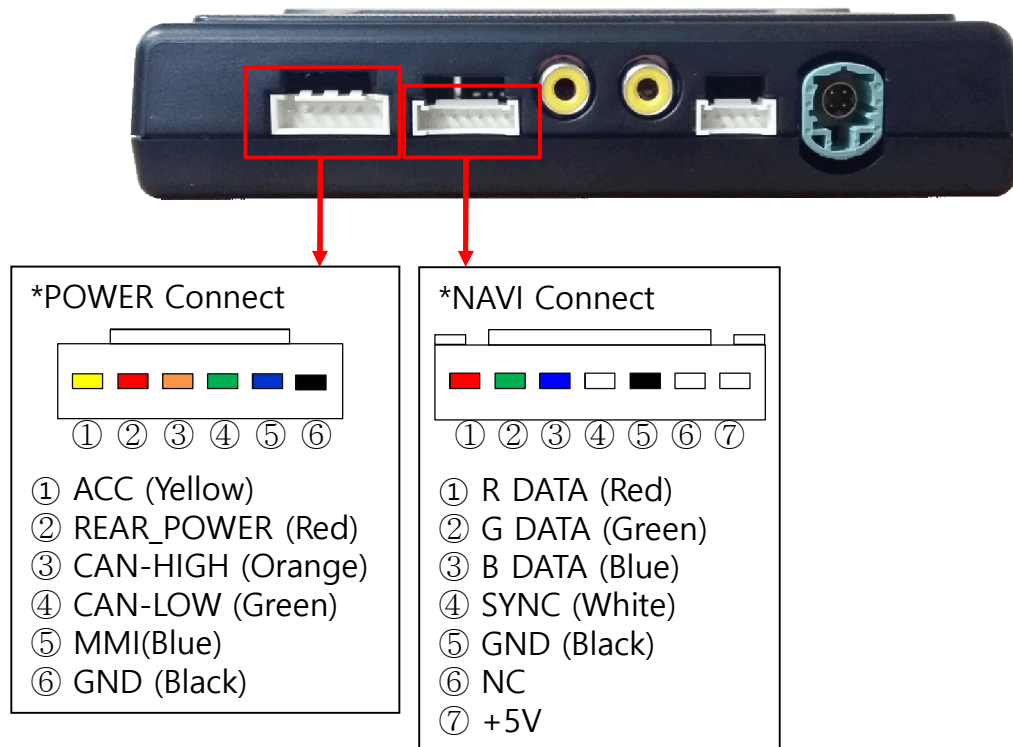
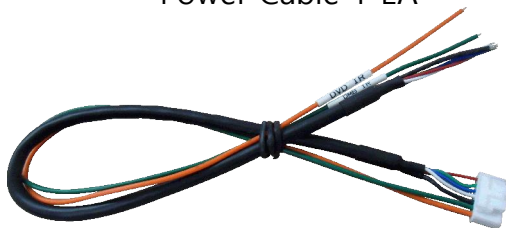GU Electronic

6. Product Composition

Interface 1 EA

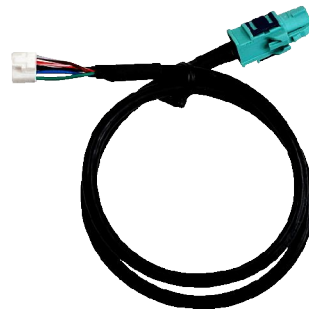Rear Detect Cable 1 EA

Power Cable 1 EA

RGB NAVI Cable(7pin) 1 EA

OSD Board 1 EA

LVDS Cable 1 EA

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7. DIP S/W Setting

* ON : DOWN , OFF : UP

PIN	FUNCTION	DIP S/W Selection
1	NAVI	ON : Not Used OFF : Used
2	VIDEO	ON : Not Used OFF : Used
3	N.C	
4	N.C	
5	CAR type SEL	Right Picture
6		
7		
8		

* DIP S/W Example

Audi_A3_5.8"
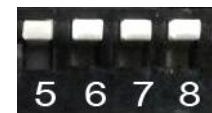

Audi_A3_7.0"

Audi_A4/Q7_7.0"

Audi_A6_8.0"

Audi_TT_12.0"

Audi_Q2_2017year_7.0"

Volkswagen_Golf_5.8"

Volkswagen_Polo_6.5"

Volkswagen_Golf_6.5"
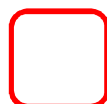

Volkswagen_Golf_8.0"

Volkswagen_Tiguan_8.0"

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8. Mode Change

Mode Change StreeingWheel for Audi A3/A6/A7/Q7/TT

MENU	Option / SteeringWheelBtn NAVI		
Config	SteeringWheelBtn	MODE NAV OFF	
Option	SteeringChannel	Off	
Image	Camera	Rear	
Screen	Reset	Execute Cancel	
Parking			

- To use the Streeing button You must select the "MODE" or "NAV" button in the menu.
- Select "OFF" when not in use.

Mode Change MMI Button for Audi A6/A7

mode change(1 second)

Return OEM dispaly

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8. Mode Change

Mode Change SteeingWheel for Volkswagen Golf7/Polo

- To use the Streeing button You must select the "MUTE" or "DOWN" button in the menu.
- Select "OFF" when not in use.

MENU	Option / SteeringWheelBtn NAVI	
Config	SteeringWheelBtn	MUTE DOWN OFF
Option	SteeringChannel	Off
Image	Camera	Rear
Screen	Reset	Execute Cancel
Parking		

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8. Mode Change

Mode Change StreeingWheel for Volkswagen Tiguan

MENU	Option / SteeringWheelBtn NAVI			
Config	SteeringWheelBtn	MUTE	DOWN	OFF
Option	SteeringChannel	Off		
Image	Camera	Rear		
Screen	Reset	Execute	Cancel	
Parking				

- To use the Streeing button You must select the "DOWN" button in the menu.
- Select "OFF" when not in use.

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8. Mode Change

Mode Change StreeingWheel for Porsche PCM4.0

MENU	Option / SteeringWheelBtn NAVI	
Config	AV Out	USER
Option	Deck Button	Setup
Image	SteeringWheelBtn	ON OFF
Screen	SteeringChannel	Off
Parking	UI DVB-T(DMB)	On

- To use the Streeing button You must select the "ON" in the menu.
- Select "OFF" when not in use.

mode change(1 second)

MENU	Option / SteeringChannel NAVI	
Config	AV Out	USER
Option	Deck Button	Setup
Image	SteeringWheelBtn	OFF
Screen	SteeringChannel	On Off
Parking	UI DVB-T(DMB)	On

- To use the Streeing button You must select the "ON" in the menu.
- Select "OFF" when not in use.

DVB-T channel up/down in the DVB-T mode.

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9. OSD(On Screen Display) Control

OSD control

MENU	Press to display when there is no OSD screen. When OSD screen is on, press it to EXIT or OFF.
SEL	Item Selection, Value Selection
UP	Item up Increase selected value
DOWN	Item down 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

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9. OSD(On Screen Display) Control

OSD Config

First Menu	Second Menu	Third Menu	Description
Config	NAVI-RGB	DIGTAL-INAVI :	Setting the Connected NAVI Model
	VIDEO	ELT_DVBT20 :	Setting the Connected DVB-T Model
	RearCam	AVM VIDEO :	Setting the Connected RearCam Model
	Reset	Execute	Reset to default value of Config menu

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10. OSD(On Screen Display) Control

OSD - Option Menu

First Menu	Second Menu	Third Menu	Description
	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-RcvOpt	ON	After RearCam shows FrontCam and returns to previous state
		OFF	Disable feature
	DecK Button	MENU	"MENU" Switching screen by using Screen button
		SETUP	"SETUP" Switching screen by using Screen button
	SteeringWheel Btn	MODE	"Mode" Switching screen by using Steering wheel button
		NAV	"Nav" Switching screen by using Steering wheel button
		OFF	Do not use features.
	Steering Channel	ON	Use DVB-T Channel Up / Down with Steering wheel button
		OFF	Do not use features.
	Camera	On	Video(CVBS) Input Hardware Port - Front
		Off	Disable feature
	Reset	Execute	Option Menu all Reset

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9. OSD(On Screen Display) Control

Rear Detect control

Car Audio Box Button

Gear

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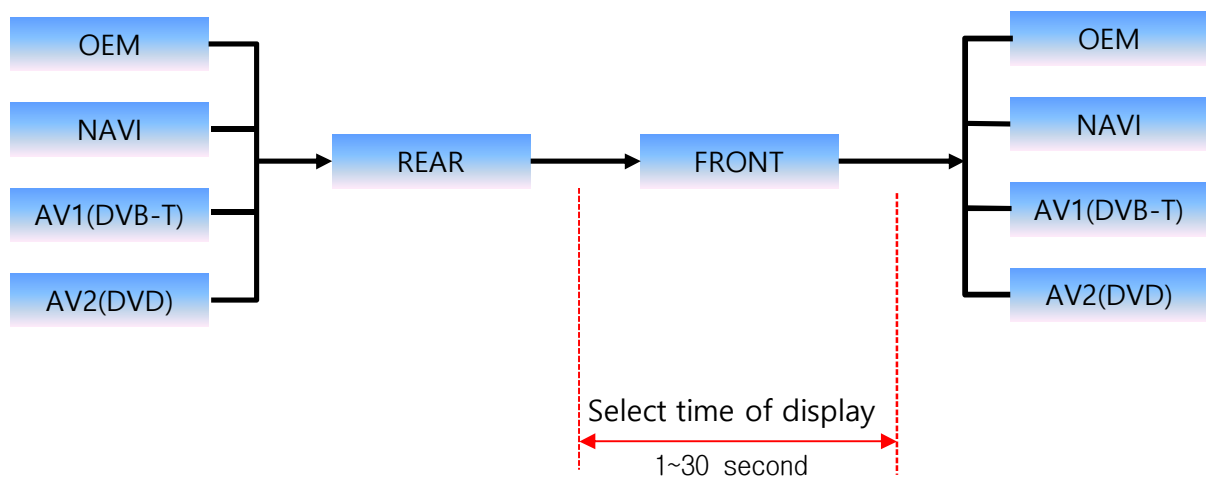# 9. OSD(On Screen Display) Control

OSD Option -> FrontCam-RcvOpt

Front Camera Auto Mode

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

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 >>

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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

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9. OSD(On Screen Display) Control

OSD – Parking Menu

First Menu	Second Menu	Third Menu	Description
Parking	Line Display	ON	Show parking line
		OFF	Do not show parking lines
	OPS Display	ON	Show OPS
		OFF	Do not show OPS
	Grid Type	Full	Do not show OPS
		SPLIT	Show OPS
	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

9. OSD(On Screen Display) Control

OSD Parking – OPS Display On / Off

MENU	Parking / Grid Type	REAR
Config	Line Display	On
Option	PDC Display	On Off
Image	Grid Type	Full
Screen	Warnings Lang	English
Parking	Horizontal	50

OPS ON Screen

MENU	Parking / Grid Type	REAR
Config	Line Display	On
Option	PDC Display	On Off
Image	Grid Type	Full
Screen	Warnings Lang	English
Parking	Horizontal	50

OPS OFF Screen

OSD Parking – Guide line On / Off

MENU	Parking / Line Display	REAR
Config	Line Display	On Off
Option	PDC Display	On
Image	Grid Type	Split
Screen	Warnings Lang	English
Parking	Horizontal	50

Parking Line ON Screen

MENU	Parking / Line Display	REAR
Config	Line Display	On Off
Option	PDC Display	On
Image	Grid Type	Split
Screen	Warnings Lang	English
Parking	Horizontal	50

Parking Line OFF Screen

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9. OSD(On Screen Display) Control

OSD Parking – OPS Display On / Off

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9. OSD(On Screen Display) Control

OSD Parking – Change warning language

Language	Warning message
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

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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.

MENU	SEL	UP	DOWN
⬭	⬭	⬭	⬭

Press "**UP**" button

Press "**MENU**" button

Press "**SEL**" button

Press "**DOWN**" button

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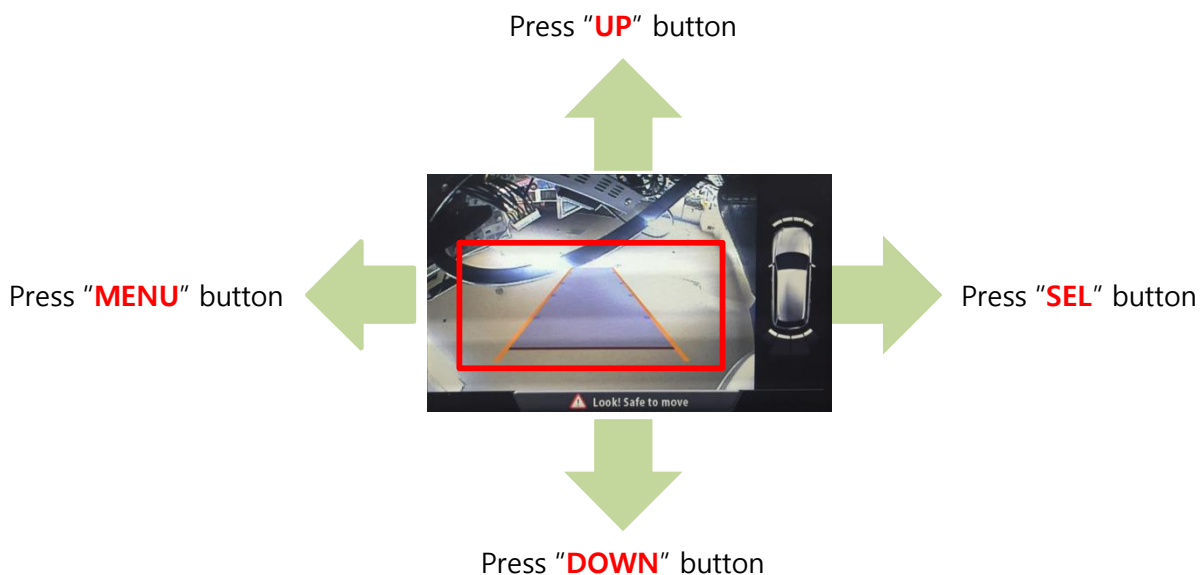
9. OSD(On Screen Display) Control

OSD – OSD Menu

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

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9. OSD(On Screen Display) Control

OSD – Utility Menu

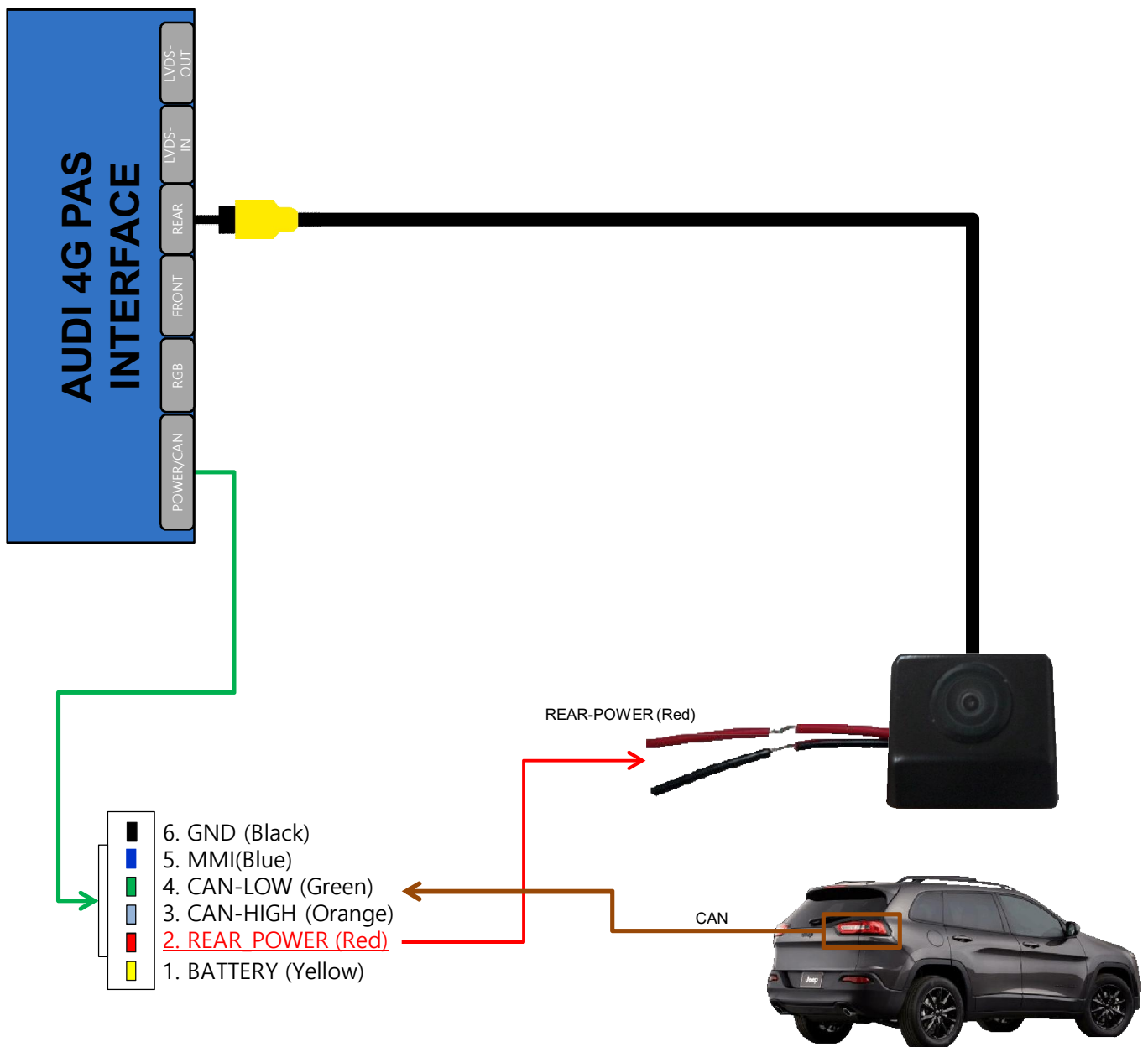| First Menu	Second Menu	Third Menu	Description
Utility	Factory Reset	Execute	Initialize all settings
	Version		FDSYOOKRX-180209 (Check for future upgrades)

Last Source :   FDSYOOKRX-180209

→ Software Version

→ Software Month

→ Software Year

→ Special Version

→ National : CN=CHINA, KR=KOREA, JP=JAPAN, US=United States

→ Hardware Version

→ PIP model : S3=Sync3, PP=PIP, LV=LVDS

→ Motor model : FD=FORD,
BM=BMW,
BE=BENZ,
MA=MASERATI,
LX:LEXUS

10. Install Manual

1. Installation External Reverse(Rear) Camera Connection

AUDI 4G PAS INTERFACE

LVDS-OUT
LVDS-IN
REAR
FRONT
RGB
POWER/CAN

REAR-POWER (Red)

6. GND (Black)
5. MMI(Blue)
4. CAN-LOW (Green)
3. CAN-HIGH (Orange)
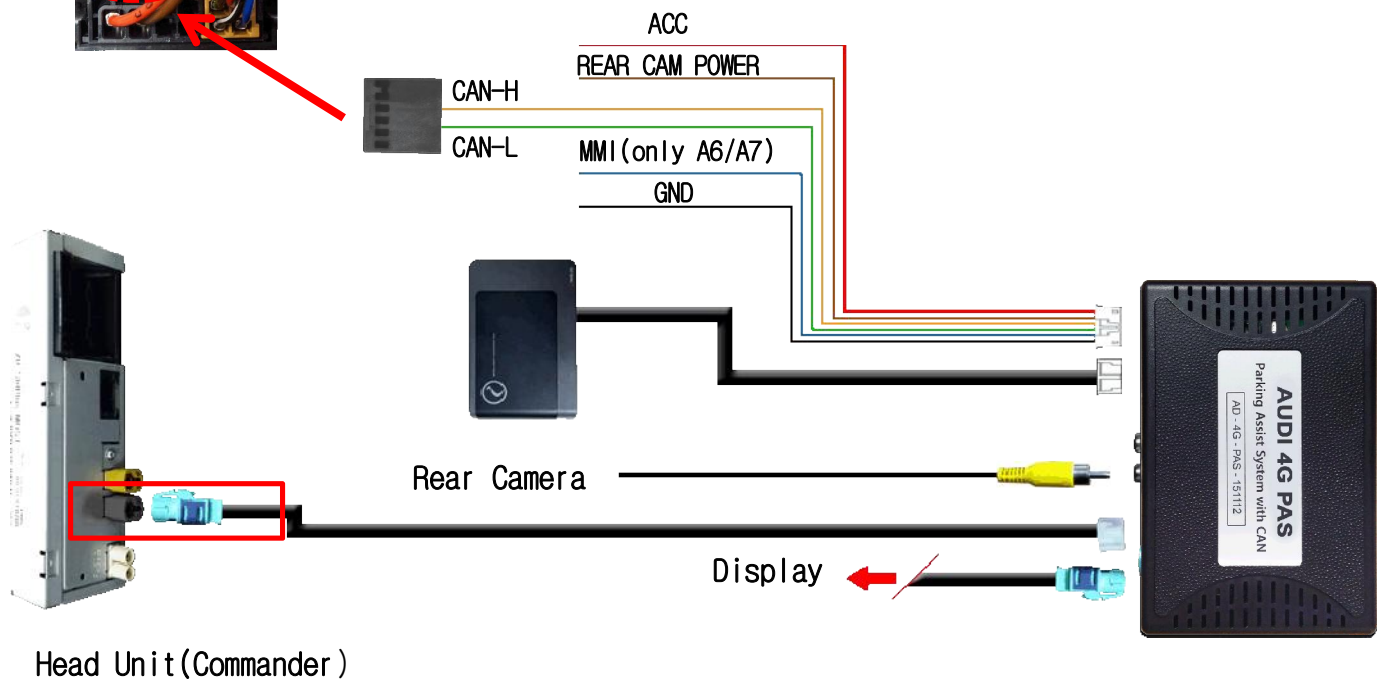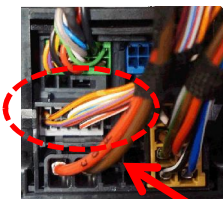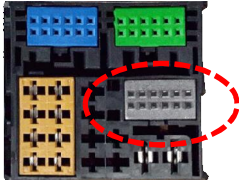2. REAR POWER (Red)
1. BATTERY (Yellow)

CAN

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10. Install Manual

2. Installation LVDS connection

Must be gray
Do not use blue, green

ACC
REAR CAM POWER
CAN-H
CAN-L   MMI(only A6/A7)
GND

AUDI 4G PAS
Parking Assist System with CAN
AD-4G-PAS-151112

Rear Camera

Display

Head Unit(Commander)

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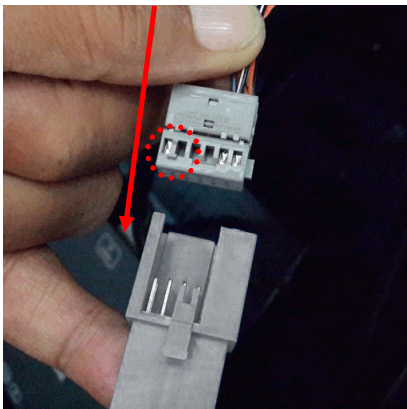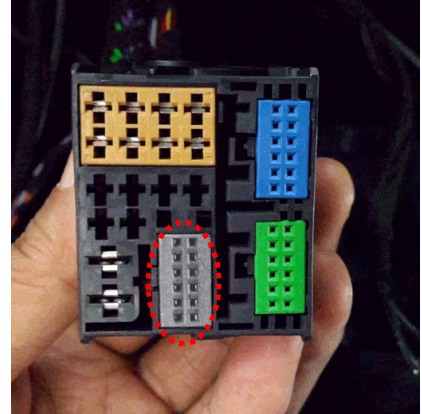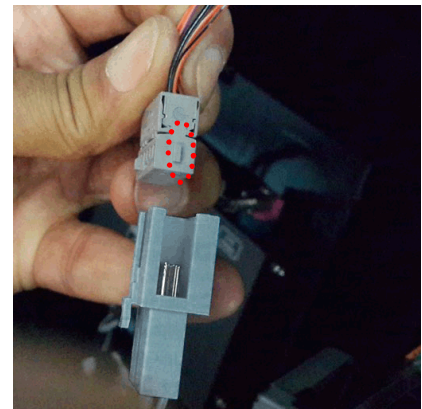
10. Install Manual

3. Installation CAN connection
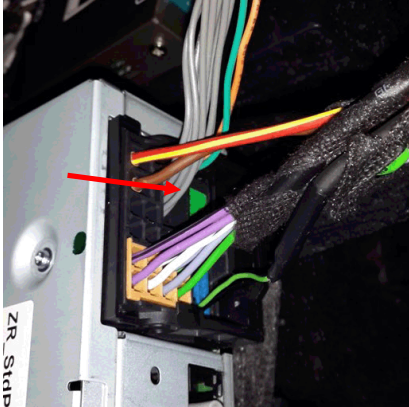
Remove the original gray connector.

Attach the connector carefully to the locking part.

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11. Q & A

FAQ

1. Not possible to switch mode
   - Check connection of OSD Key pad wire
   - Check CAN connection
2. Display wrong size of picture
   - Check Dip s/w setting
3. Display black screen in OEM mode
   - Check connection of LVDS/LCD cable
4. Not possible to switch to rear screen
   - Check the packing setting (OSD Menu – option – RearCam-Det)

Caution

1. The device must not be installed in where it interferes driving
   (close to brake pedal, steering wheel, airbag etc.)
2. LVDS cable must be connected correctly according to the manual
3. Insulate the end of wire by using electrical tape
4. The installation should be done by expert
5. GU electronic does not take any responsibility for any problem caused by wrong installation
.

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