Apple CarPlay Adapter for
Alfa Romeo Giulia / Stelvio (2016 -)
User Manual

Contents
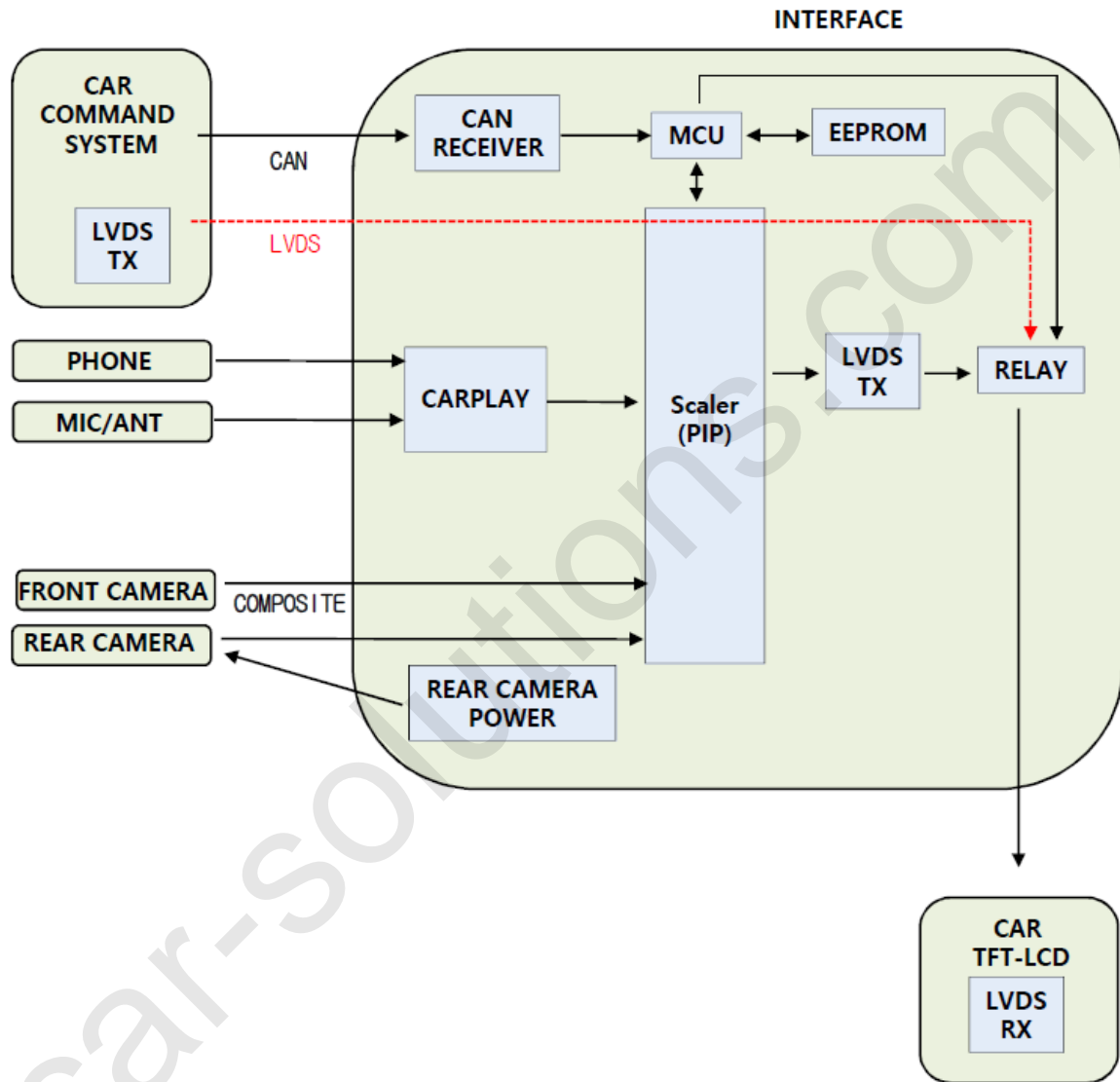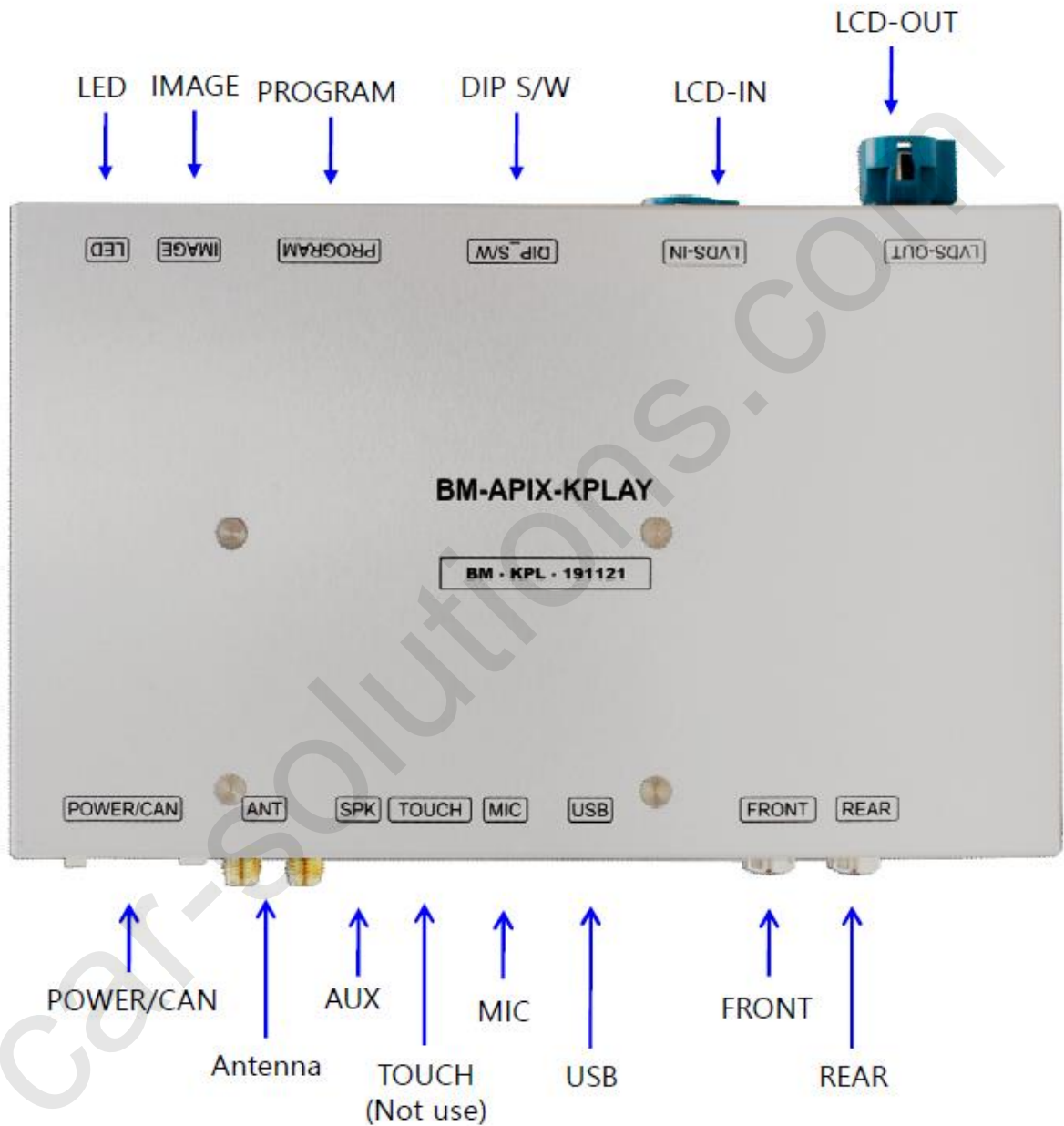
Main Specifications

1. Input (MULTI VIDEO INTERFACE)
   - 1 x CarPlay Wireless / USB
   - 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
   - 1 x Audio L/R Output.
   - 1 x LVDS Output (LCD Operation)

3. Power
   - 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

Block Diagram

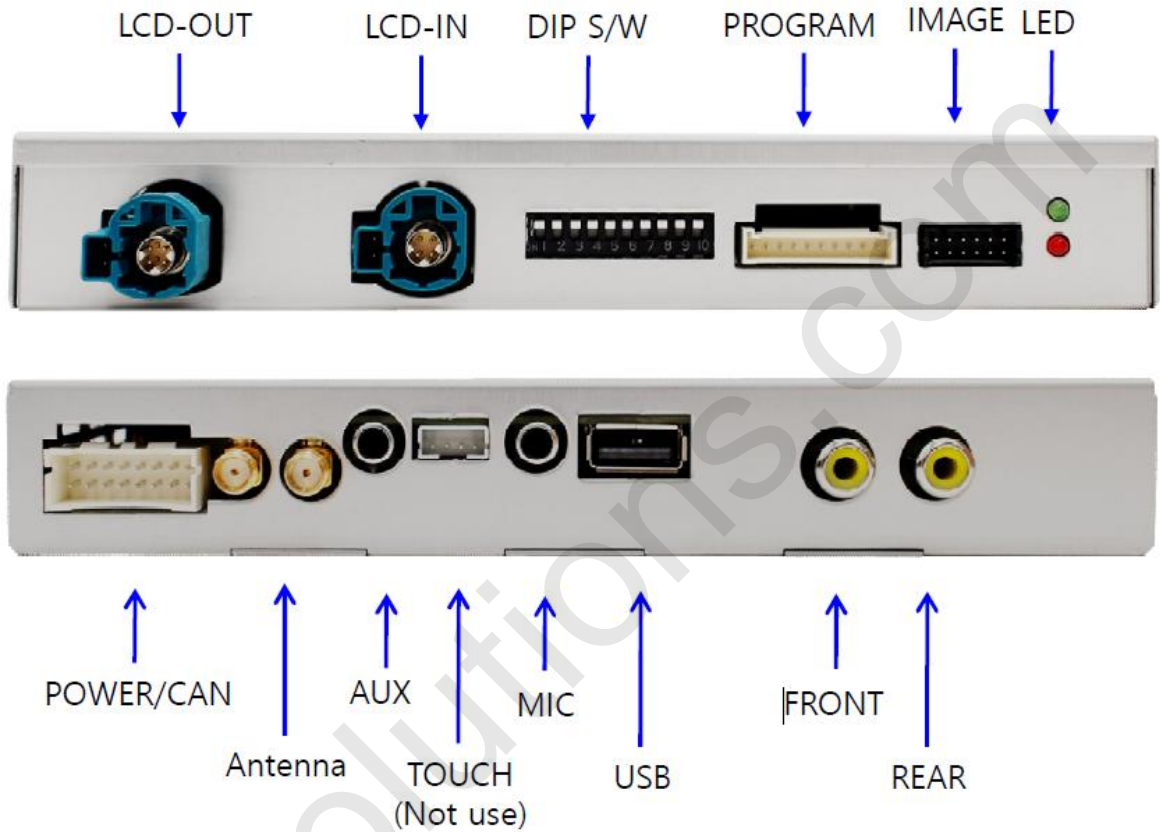**INTERFACE**

CAR COMMAND SYSTEM	CAN → CAN RECEIVER → MCU ↔ EEPROM
LVDS TX	LVDS

PHONE → CARPLAY → Scaler (PIP) → LVDS TX → RELAY

MIC/ANT →

FRONT CAMERA — COMPOSITE →

REAR CAMERA

REAR CAMERA POWER

CAR TFT-LCD
LVDS RX

External Appearance (1)

LCD-OUT

LED   IMAGE   PROGRAM   DIP S/W   LCD-IN

[LED] [IMAGE] [PROGRAM]   [DIP_S/W]   [LVDS-IN]   [LVDS-OUT]

BM-APIX-KPLAY

BM · KPL · 191121

[POWER/CAN] [ANT] [SPK] [TOUCH] [MIC]   [USB]   [FRONT] [REAR]

POWER/CAN   AUX   MIC   FRONT

Antenna   TOUCH   USB   REAR
(Not use)

External Appearance (2)

LCD-OUT   LCD-IN   DIP S/W   PROGRAM   IMAGE   LED

POWER/CAN   AUX   MIC |FRONT

Antenna   TOUCH   USB   REAR
(Not use)

Connector Pin Assignment

*POWER Connect

| 1 | 15 |
| 2 | 16 |

1. Battery (Red)
2. Battery
3. Rear-DET (Brown)
4. Front-DET (Blue)
5. CAN1-L (Green)
6. CAN1-H (Brown)
7. CAN2-L (White)
8. CAN2-H (Violet)

9. N.C
10. N.C
11. N.C
12. Rear-power (Red)
13. Front-power (Red)
14. Mode (Green)
15. GND (Black)
16. GND (Black)

Package Content

Interface 1 EA

LVDS Cable 1 EA

Power Cable 1 EA

Microphone 1 EA

Bluetooth / Wifi Antenna 2EA

DIP S/W Setting

* ON : DOWN , OFF : UP

PIN	FUNCTION	DIP S/W Selection
1	N.C	
2	N.C	
3	N.C	
4	N.C	
5	N.C	
6		
7		
8	CAR type SEL	Right Picture
9		
10	N.C	

* DIP S/W Example

ALPA ROMEO 8.8"

ALPA ROMEO 6.5" 2016year

ALPA ROMEO 6.5" 2020year

BMW 10.2"

BMW 8.8"

BMW 6.5"

Modes Changing (1)

CarPlay Buttons for Alfa Romeo

mode change(2 second)

Return OEM dispaly

2 second OEM dispaly

Modes Changing (2)

CarPlay Buttons for Alfa Romeo

① PUSH : Selection
② Moving toward the left
③ Moving toward the right
④ Moving toward the left
⑤ Moving toward the right
⑥ Moving up
⑦ Moving down
⑧ Return
⑨ Siri
⑩ Track Down
⑪ Track Up

OSD (On Screen Display) Control (1)

OSD Control

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

OSD (On Screen Display) Control (2)

OSD Config

First Menu	Second Menu	Third Menu	Description
Config	NAVI-RGB	DIGTAL-INAVI :	Setting the Connected NAVI Model
	RearCam	AVM VIDEO :	Setting the Connected RearCam 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
```

OSD (On Screen Display) Control (3)

OSD – Options 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 Front-Det Wire
	FrontCam-Type	OEM	Original Camera
		ExtDevice	Equipped with external camera
	FrontCam-Power	ON	+ 12V continuous supply
		AUTO	+ 12V supply only in Rear camera mode
		OFF	+ 12V off
	FrontCam-Det	GEAR	Detected by CAN
		WIRE	Detected by Front-Det Wire
	FrontCam-RcvOpt	ON	After RearCam shows FrontCam and returns to previous state
		OFF	Disable feature

OSD (On Screen Display) Control (4)

OSD – Options Menu

First Menu	Second Menu	Third Menu	Description
Option	ScrChg-Call	On	When the call comes in, it switches to the oem screen.
		Off	Disable feature
	ScrChg-Climate	On	When operating the air conditioning button will display the air conditioning screen for 2 seconds below the screen.
		Off	Disable feature
	ScrChg-Driving	On	When operating the driving button, the oem screen is display for 2 seconds.
		Off	Disable feature
	Reset	Execute	Option Menu all Reset

OSD (On Screen Display) Control (5)

OSD Option -> FrontCam-RcvOpt

Front Camera Auto Mode

       0 second = FrontCam-RcvOpt menu OFF

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

OSD (On Screen Display) Control (6)

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 >>

OSD (On Screen Display) Control (7)

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

OSD (On Screen Display) Control (8)

OSD – Parking Menu

First Menu	Second Menu	Third Menu	Description
Parking	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

OSD (On Screen Display) Control (9)

OSD Parking – Guide line On / Off

Parking Line ON Screen

Parking Line OFF Screen

Move down for 1 second to change the size of the rear camera.

RearCamera Full size → RearCamera middle size → RearCamera None

OSD (On Screen Display) Control (10)

OSD Parking – Change warning language
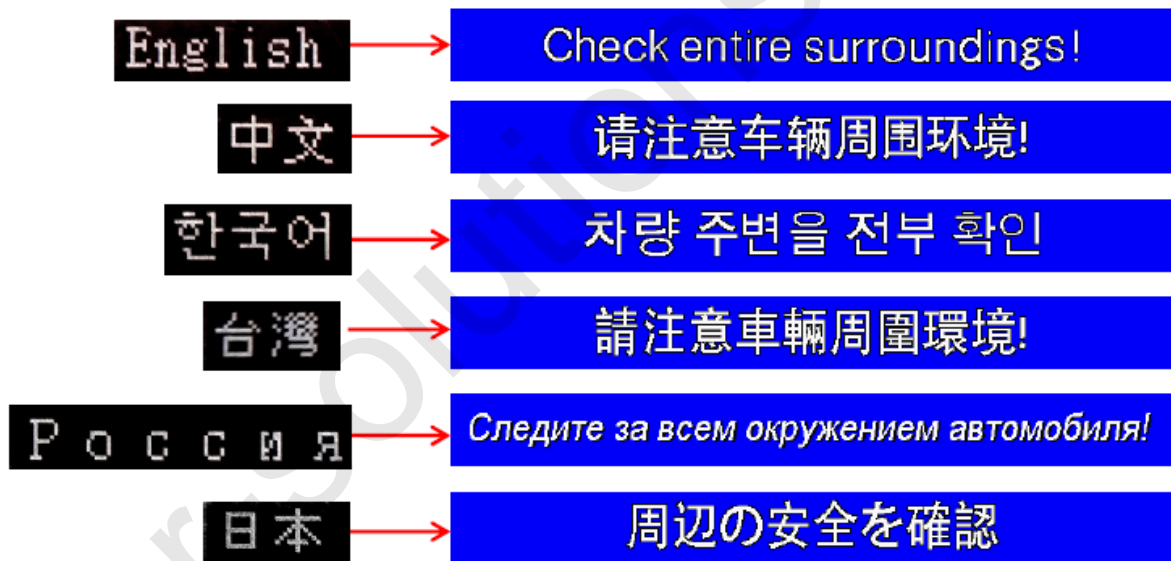
OSD (On Screen Display) Control (11)

OSD Parking – Adjust position of parking guideline

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.

Press "UP" button

Press "MENU" button

Press "SEL" button

Press "DOWN" button
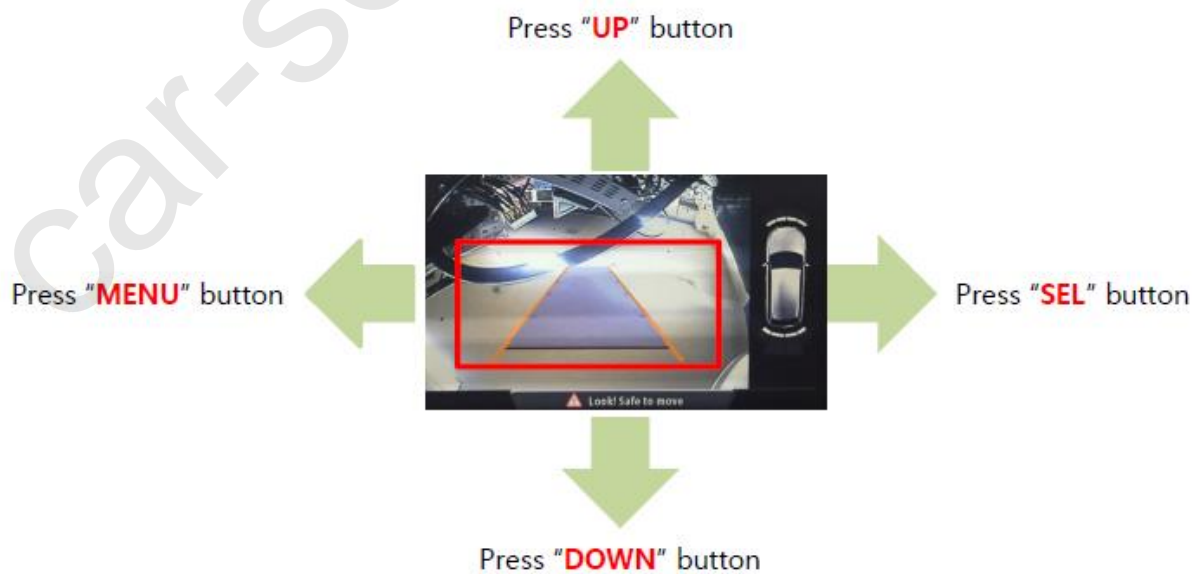
OSD (On Screen Display) Control (12)

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

OSD (On Screen Display) Control (13)

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,
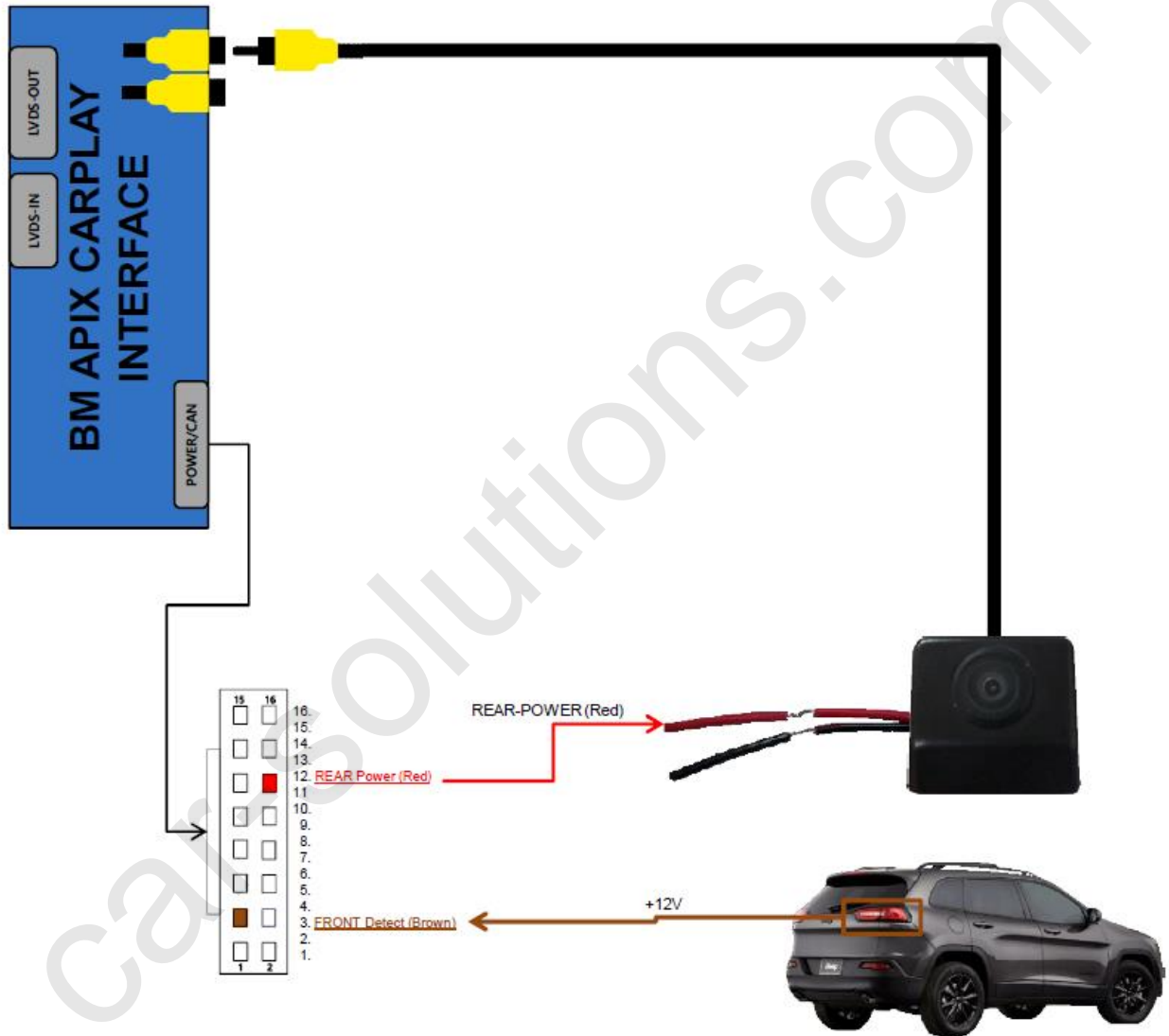 MA=MASERATI,
  LX:LEXUS

Installation Guide

1. Installing CarPlay - KPLAY
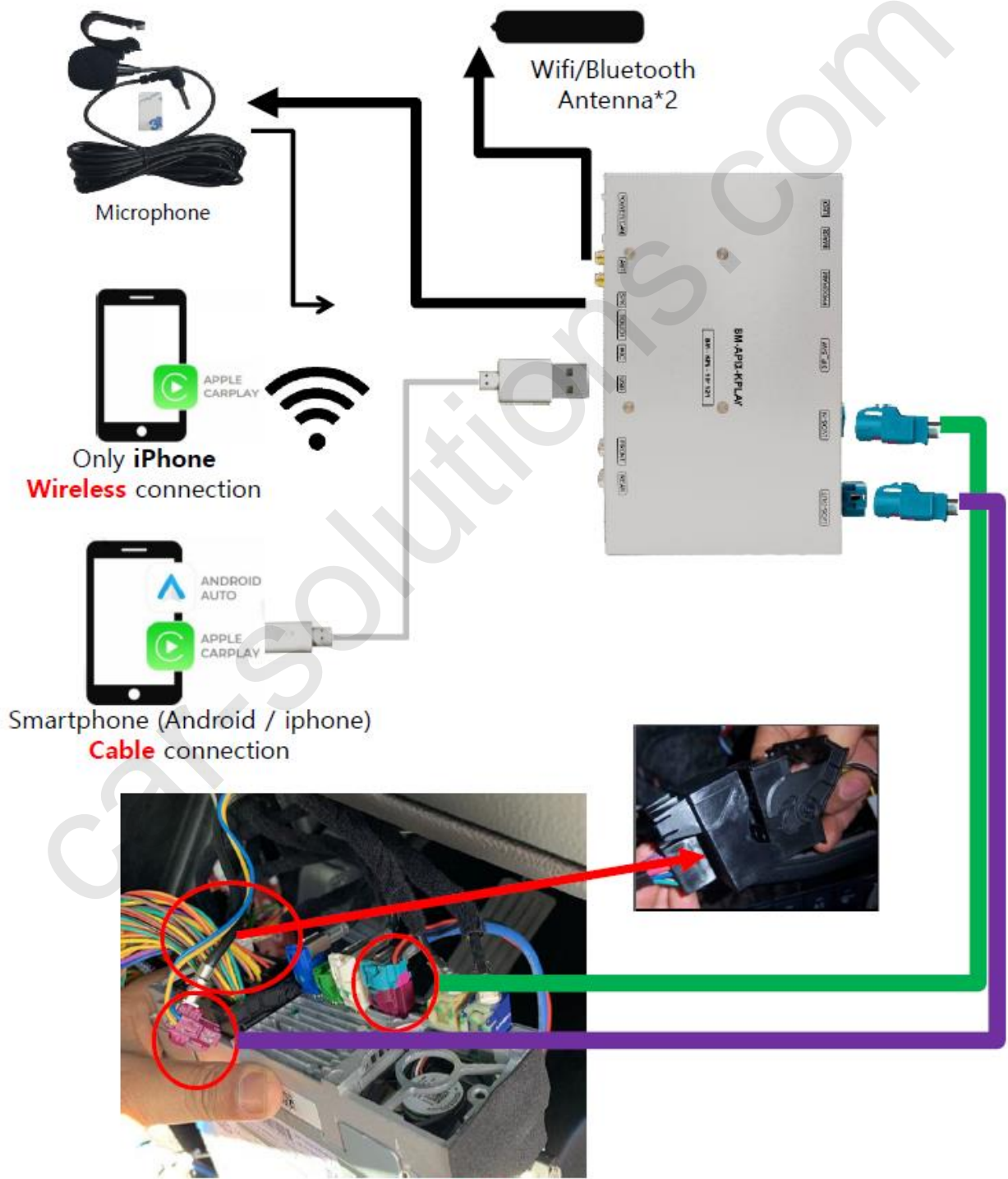
Installation Guide

2. Installing External Reverse (Rear) Camera Connection

Questions & Answers

1. Cannot switch the mode

- Check connection of OSD Key pad wire

- Check CAN connection

2. Display shows a wrong size of picture

- Check Dip s/w setting

3. Display shows black screen in OEM mode

- Check LVDS/LCD cable connection

4. Cannot switch to rear camera 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 an expert.