

CHEVROLET2012 PAS TD

- MODEL : ML-2012-180720
- DATE : 2020.02.10



GU ELECTRONIC

Index

1. Main Spec
2. Block Diagram
3. Dimension
4. External Appearance
5. Connector Pin Assignment
6. Product Composition
7. DIP S/W Setting
8. Mode Change
9. Touch Control
10. OSD(On Screen Display) Control
11. Install Manual
12. Q & A

1. Main Spec.

1. Input Spec. (MULTI VIDEO INTERFACE)

- 1 x Digital RGB Input (Navigation System source)
- 1 x Analog RGB Input (Navigation System output)
- 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 LVDS 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 Vertual Analog Touch (Navigation System source)
- 1 x Uart Digital Touch (Navigation System source)
- 1 x LVDS Output (LCD Operation)

3. Power Spec.

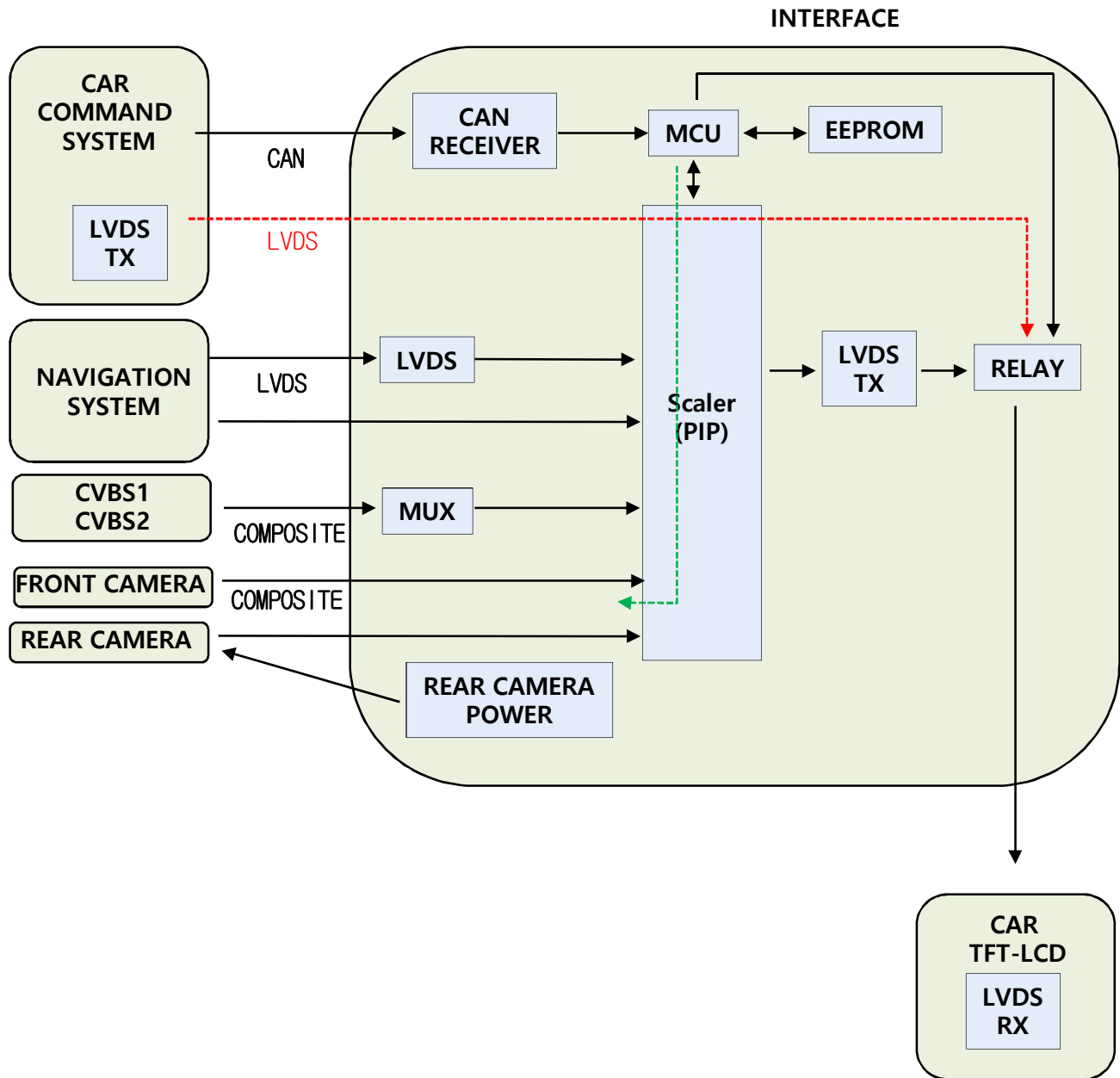
- Input Power : 8VDC ~ 24VDC
- Consumption Power : 12Watt, Max

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



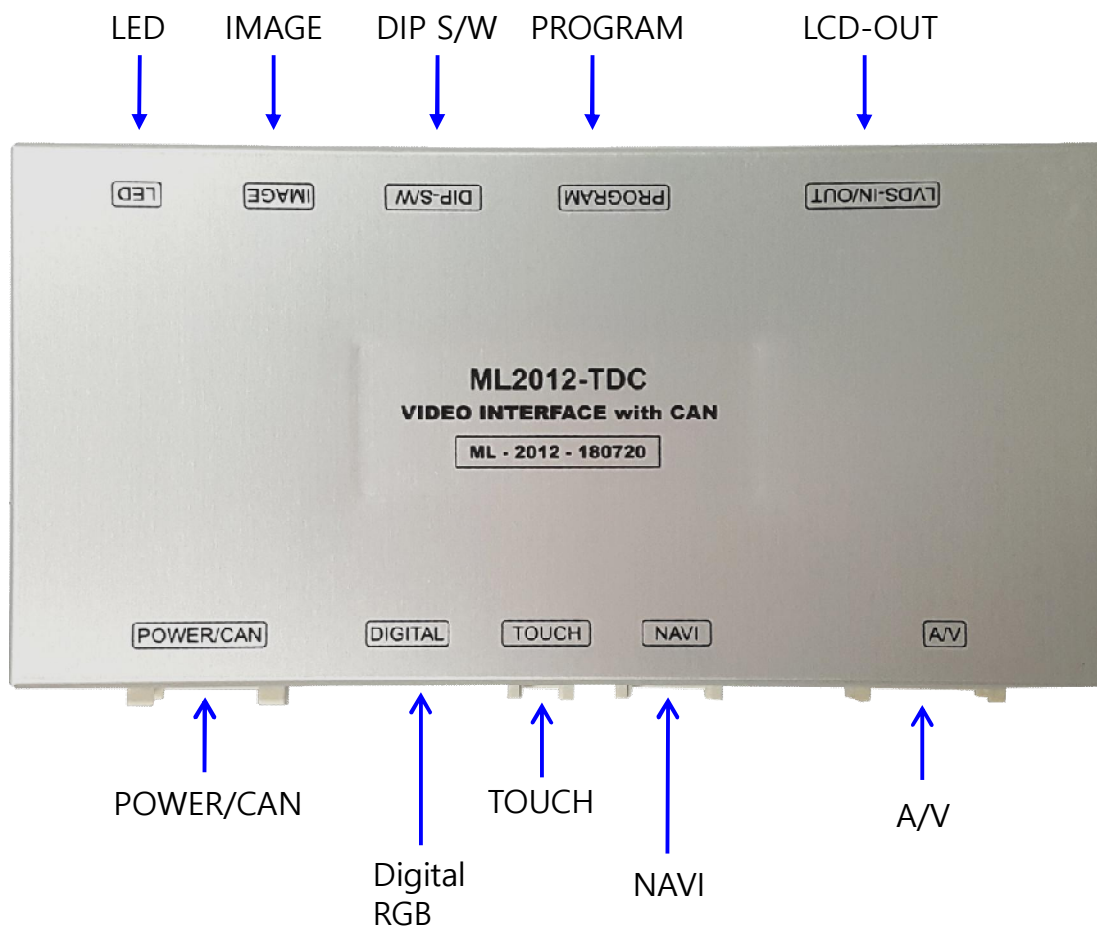
3. Dimension

156mm * 83mm * 22mm

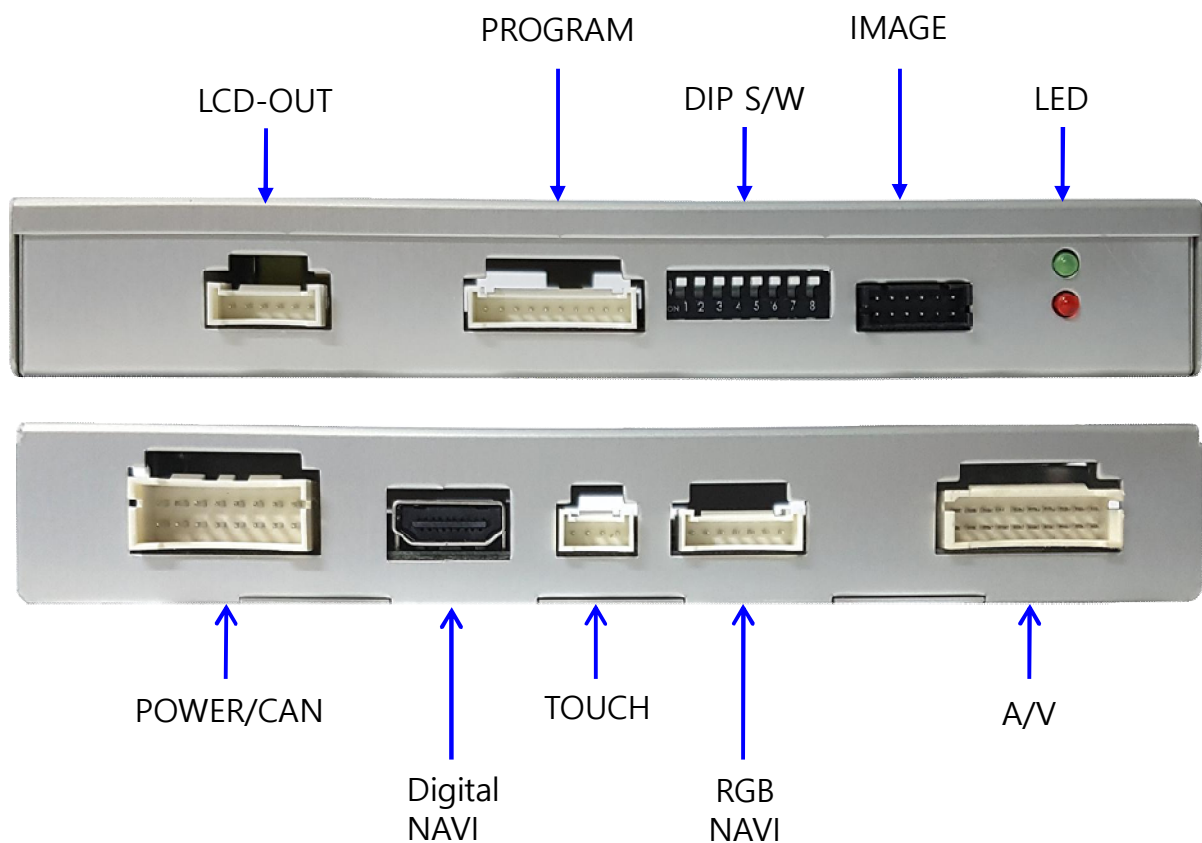


* This can change under manufacturer's circumstance

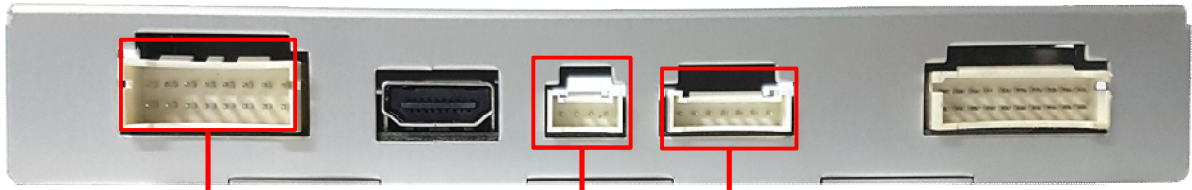
4. External Appearance



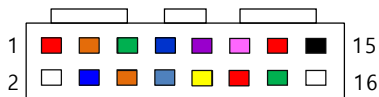
4. External Appearance



5. Connector Pin Assignment

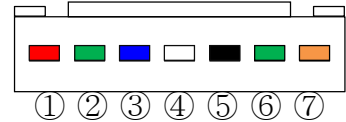


*POWER Connect



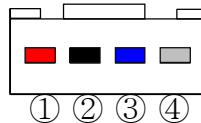
- | | |
|---------------------|---------------------|
| 1. ACC (Red) | 9. CAN3-L (Violet) |
| 2. N.C | 10. CAN3-H (Yellow) |
| 3. Rear-DET (Brown) | 11. SWC (Pink) |
| 4. Front-DET (Blue) | 12. Rear-VCC (Red) |
| 5. CAN1-L (Green) | 13. Front-VCC (Red) |
| 6. CAN1-H (Brown) | 14. Mode (Green) |
| 7. CAN2-L (Blue) | 15. GND (Black) |
| 8. CAN2-H (Orange) | 16. N.C |

*NAVI Connect



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

*Touch Connect

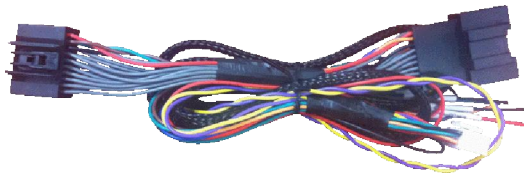


- | |
|------|
| ① Y- |
| ② X- |
| ③ Y+ |
| ④ X+ |

6. Product Composition



Interface 1 EA



Power Cable 1 EA



RGB NAVI Cable(7pin) 1 EA



Touch convertor Cable(KD-900) 1 EA



Mode S/W 1 EA



A/V Cable (24pin) 1 EA



OSD Board 1 EA



LVDS 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

6. Product Composition

* CarPlay(NV17) Set Sales(option)



CarPlay Main 1 EA



AUX Cable 1 EA



Power Cable 1 EA



HDMI Cable 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	N.C	
6	CAR type SEL	Right Picture
7		
8		

* DIP S/W Example



Malibu 7" 800*480,



Alpheon 7" 800*480,



GL8 7" 800*480,



REGAL 7" 800*480,



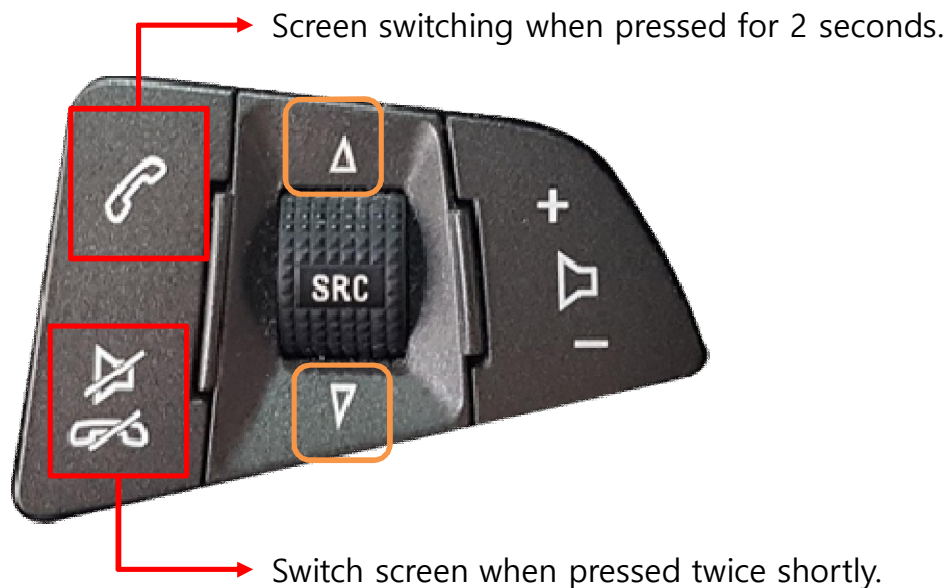
LACROSSE 7" 800*480,



HOLDEN Commodore 7"

8. Mode Change

Mode Change StreeingWheel



MENU	SteeringWheelBtn	NAVI
Config	FrontCam-Power	Auto
Option	FrontCam-Det	ExtWire
Image	FrontCam-RcvOpt	0s
Screen	AV Out	USER
Parking	SteeringWheelBtn	On Off

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



MENU	SteeringChannel	NAVI
Config	SteeringChannel	On Off
Option	Mode Button	NAV
Image	UI DVB-T(IMB)	On
Screen	UI DVD	On
Parking	ScrChg-Btn	Off

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



8. Mode Change

Mode Change Button for MALIBU



 Return OEM dispaly

MENU	Mode Button		NAVI
Config	SteeringChannel	On	
Option	Mode Button	HOME CFG NAV OFF	
Image	UI DVB-T(DMB)	On	
Screen	UI DVD	On	
Parking	ScrChg-Btn	Off	

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

 mode change(1 second)

MENU	ScrChg-Btn		NAVI
Config	SteeringChannel	On	
Option	Mode Button	NAV	
Image	UI DVB-T(DMB)	On	
Screen	UI DVD	On	
Parking	ScrChg-Btn	On	Off

- Turn the button to show the oem screen for 3 seconds

 2second OEM dispaly

8. Mode Change

Mode Change Button for ALPHEON/LACROSSE



 Return OEM dispaly

MENU	Mode Button		NAVI
Config	SteeringChannel	On	
Option	Mode Button	HOME CFG	NAV OFF
Image	UI DVB-T(DMB)	On	
Screen	UI DVD	On	
Parking	ScrChg-Btn	Off	

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

 mode change(1 second)

MENU	ScrChg-Btn		NAVI
Config	SteeringChannel	On	
Option	Mode Button	NAV	
Image	UI DVB-T(DMB)	On	
Screen	UI DVD	On	
Parking	ScrChg-Btn	On	Off

- Turn the button to show the oem screen for 3 seconds

 2second OEM dispaly

8. Mode Change

Mode Change Button for REGAL



 Return OEM dispaly

MENU	Mode Button		NAVI
Config	SteeringChannel	On	
Option	Mode Button	HOME CFG	NAV OFF
Image	UI DVB-T(DMB)	On	
Screen	UI DVD	On	
Parking	ScrChg-Btn	Off	

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

 mode change(1 second)

MENU	ScrChg-Btn		NAVI
Config	SteeringChannel	On	
Option	Mode Button	NAV	
Image	UI DVB-T(DMB)	On	
Screen	UI DVD	On	
Parking	ScrChg-Btn	On	Off

- Turn the button to show the oem screen for 3 seconds

 2second OEM dispaly

8. Mode Change

Mode Change Button for REGAL



MENU	Mode Button	NAVI
Config	SteeringChannel	On
Option	Mode Button	HOME CFG NAV OFF
Image	UI DVB-T(DMB)	On
Screen	UI DVD	On
Parking	ScrChg-Btn	Off

- To use the Streaming button You must select the "HOME" or "CONFIG" or "NAV" button in the menu.
- Select "OFF" when not in use.

MENU	ScrChg-Btn	NAVI	
Config	SteeringChannel	On	
Option	Mode Button	NAV	
Image	UI DVB-T(DMB)	On	
Screen	UI DVD	On	
Parking	ScrChg-Btn	On	Off

- Turn the button to show the oem screen for 3 seconds

9. Touch Control

Touch control - Calibration

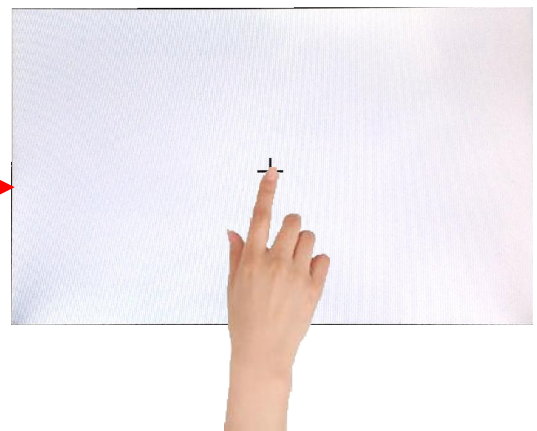


Press and hold for more than 11 seconds on NAVI, DVB-T, DVD screen.
(Note that it only works the first time after switching screens)

OR

MENU	Calibration	NAVI
OSD	Factory Reset	Execute Cancel
IR-Ctrl	Calibration	Execute Cancel
Utility	Version	FDSHOOKRX-180112

OSD menu -> Utility -> Calibration



+ Touch according to the shape coordinates.

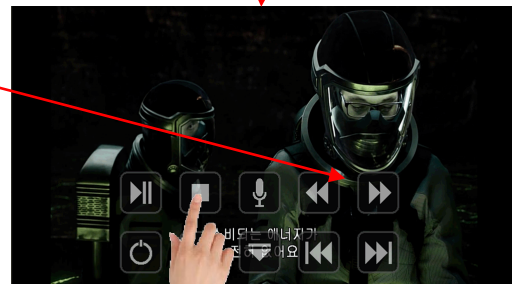
9. Touch Control

DVB-T/DVD Control

DVB-T



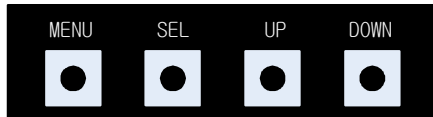
DVD



Press Icon

10. 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	
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

10. 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
	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		

10. 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-Power	ON	+ 12V continuous supply
		AUTO	+ 12V supply only in Front 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
	AV Out	AV1	In the OEM, NAVI, AV1, FRONT, and REAR modes, the output of AV OUT is set to AV1.
		AV2	In the OEM, NAVI, AV2, FRONT, and REAR modes, the output of AV OUT is set to AV2.



10. OSD(On Screen Display) Control

OSD - Option Menu

First Menu	Second Menu	Third Menu	Description
Option	AV Out	USER	In the OEM, NAVI, FRONT, and REAR modes, output the output of AV OUT to the final screen.
	SteeringWheel Btn	ON	To use the Streeing button You must select the "ON" button in the menu
		OFF	Do not use features.
	Steering Channel	ON	Use DVB-T Channel Up / Down with Steering wheel button
		OFF	Do not use features.
	Mode Button	HOME	Switching screen by using "HOME" button
		CFG	Switching screen by using "CONFIG" button
		NAV	Switching screen by using "NAV" button
		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
	ScrChg-Btn	On	Turn the button to show the oem screen for 2 seconds
		Off	Disable feature
	Reset	Execute	Option Menu all Reset

10. OSD(On Screen Display) Control

OSD Option -> FrontCam-RcvOpt

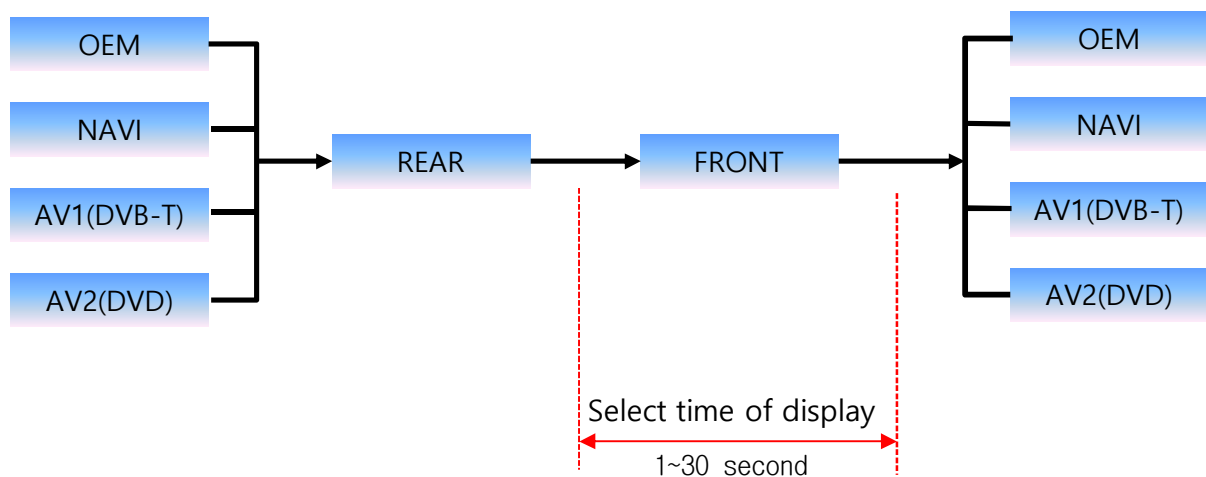
Front Camera Auto Mode

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	0s	
Screen	Steering Wheel	Voice	
Parking	Reset	Execute Cancel	

MENU	FrontCam-RcvOpt		NAVI
Config	FrontCam-Power	Auto	
Option	FrontCam-Det	ExtWire	
Image	FrontCam-RcvOpt	30s	
Screen	Steering Wheel	Voice	
Parking	Reset	Execute Cancel	



10. 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 >>



GU Electronic

10. 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

10. OSD(On Screen Display) Control

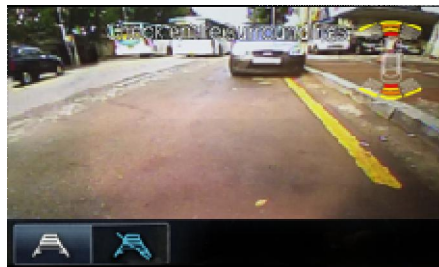
OSD – Parking Menu

First Menu	Second Menu	Third Menu	Description
Parking	OPS Display	ON	Show OPS
		OFF	Do not show OPS
	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

10. OSD(On Screen Display) Control

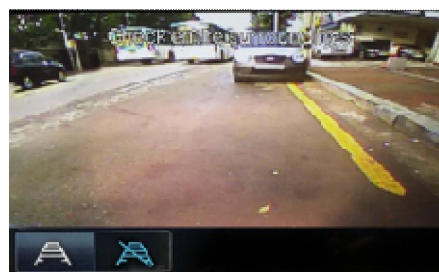
OSD Parking – OPS Display On / Off

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



OPS ON Screen

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

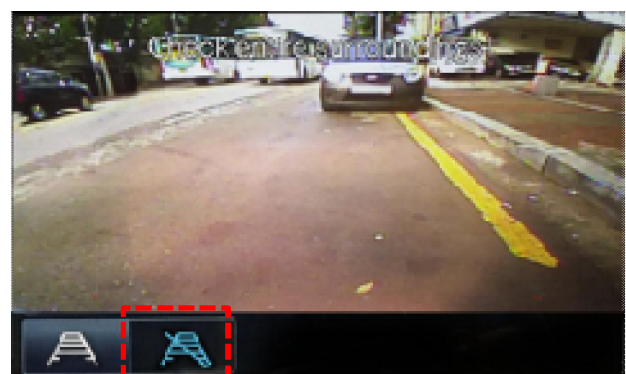


OPS OFF Screen

OSD Parking – Guide line On / Off



Parking Line ON Screen



Parking Line OFF Screen

10. 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	Р о с с и я

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!

Р о с с и я

Следите за всем окружением автомобиля!

日本

周辺の安全を確認



GU Electronic

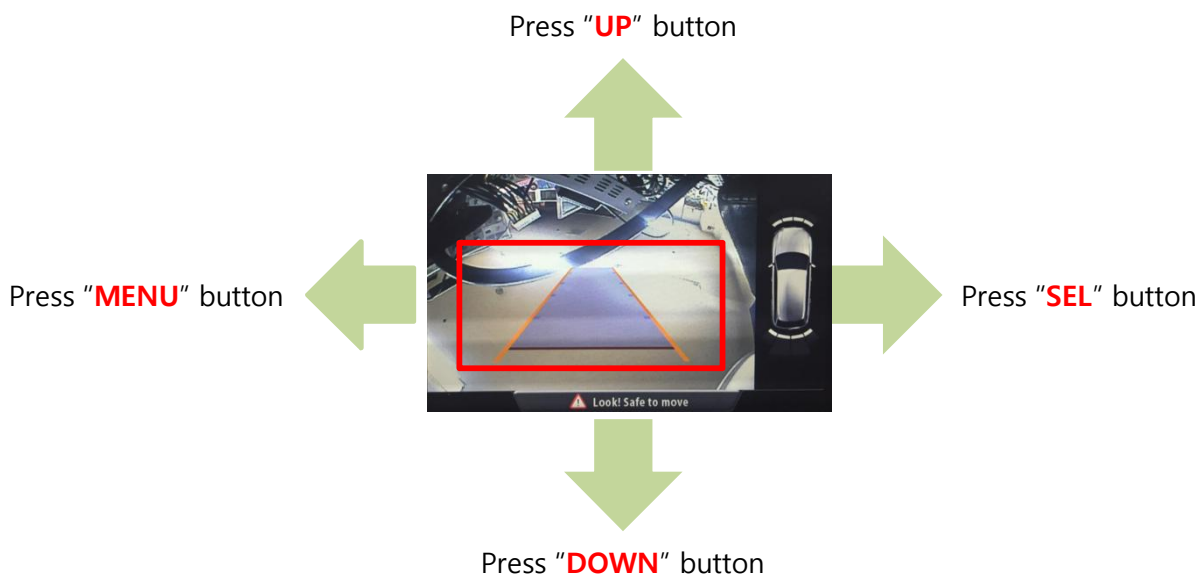
10. OSD(On Screen Display) Control

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.



10. 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	 50
IR-Ctrl	Vertical	 50
Utility	Display Time	 10s
	Transparency	 30
	Language	English
MENU	Reset DVB-T	
OSD	Reset	Execute Cancel
IR-Ctrl		
Utility		

10. OSD(On Screen Display) Control

OSD – IR learning function



* In order to work with the IR learning function, a separate IR cable is required.

MENU	IR-Ctrl / DVB-T(DMB)	NAVI
OSD	DVB-T(DMB)	Sel Learn Cancel
IR-Ctrl	DVD	Sys
Utility		

1. In DVB-T / DVD menu, select User in Sys (OSD list) or User (learned contents).
2. Select Learn from the OSD menu.



MENU	IR-Ctrl / DVB-T(DMB)	NAVI
OSD	All-Clear	
IR-Ctrl	POWER	----
Utility	SCAN	----
	CH+	----
	CH-	----

3. Before using IR learning function, select All-Clear to delete existing stored data.



MENU	IR-Ctrl / DVB-T(DMB)	DVB-T
OSD	New Code: []	
IR-Ctrl	Cfm Code: []	
Utility	Save Clr Cancel	

4. Press the remote control button to be used in each ICON once in New Code, press once again in Cfm Code to confirm it is the same and save it.



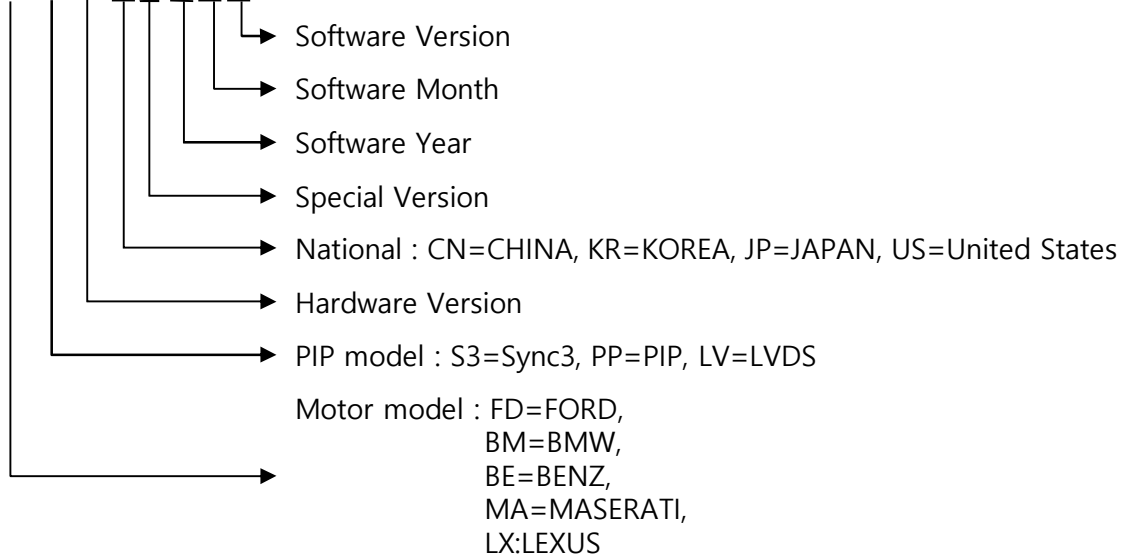
GU Electronic

10. OSD(On Screen Display) Control

OSD – Utility Menu

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

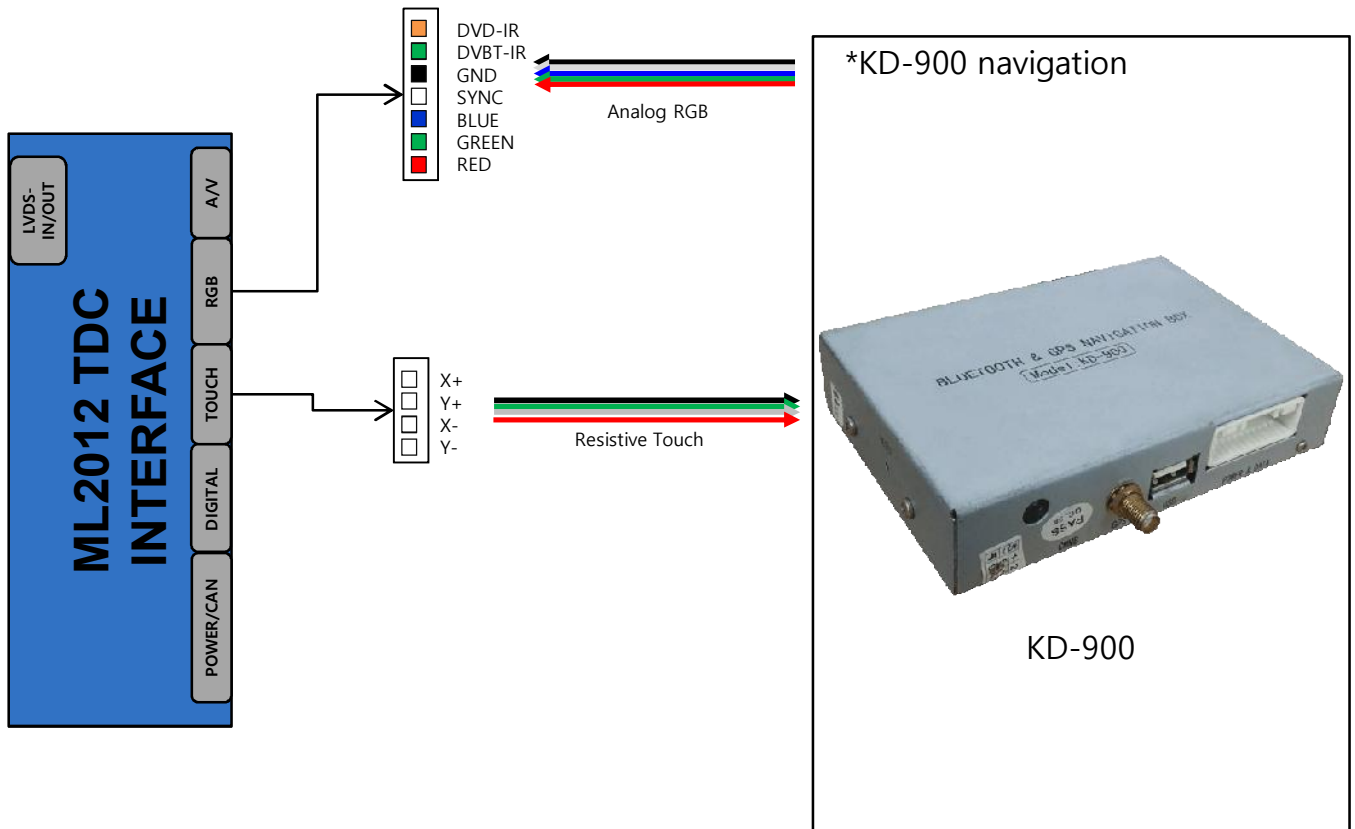
Last Source : FDSYOOKRX-180209



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

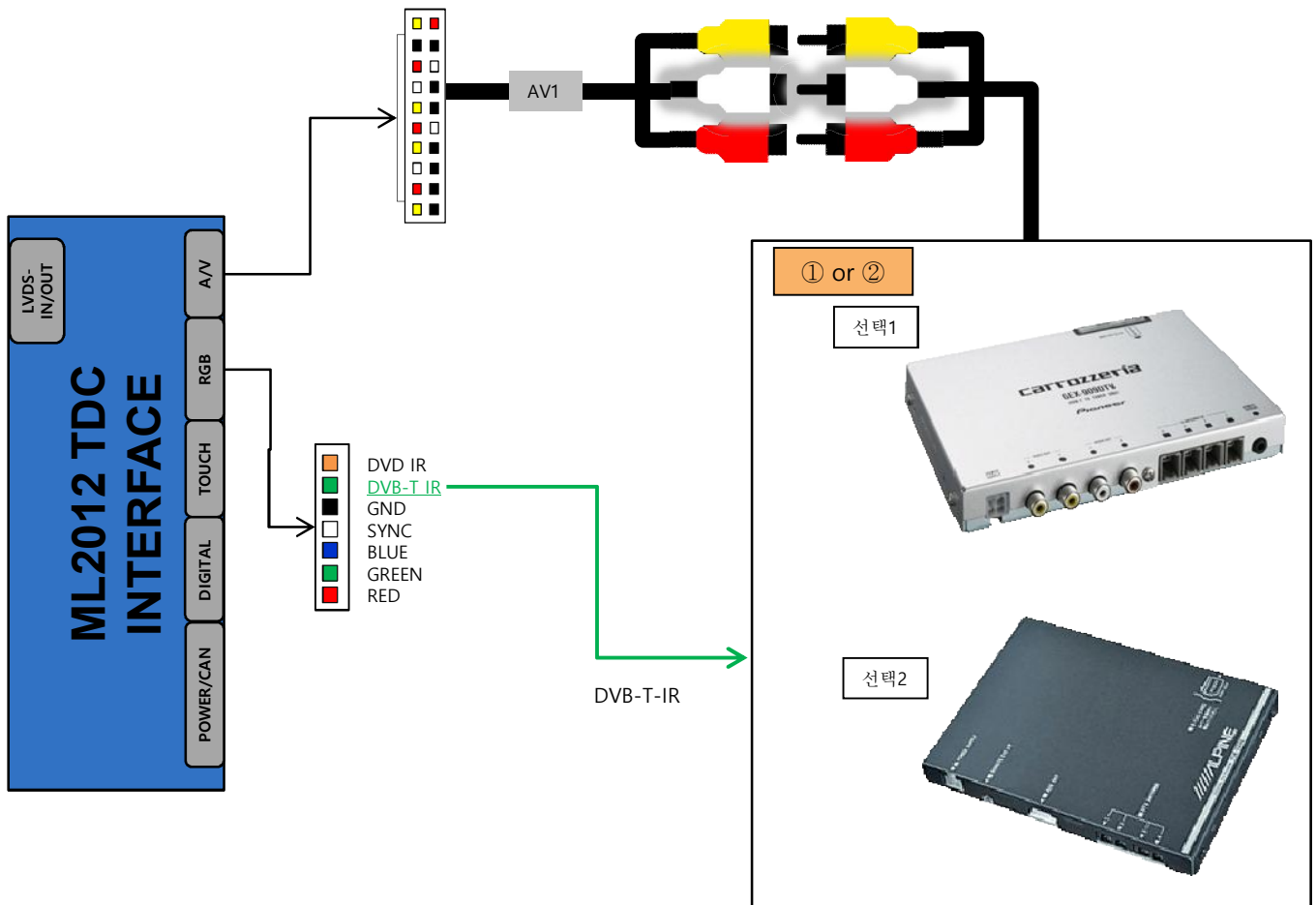
11. Install Manual

1. Installation Navigation Connection



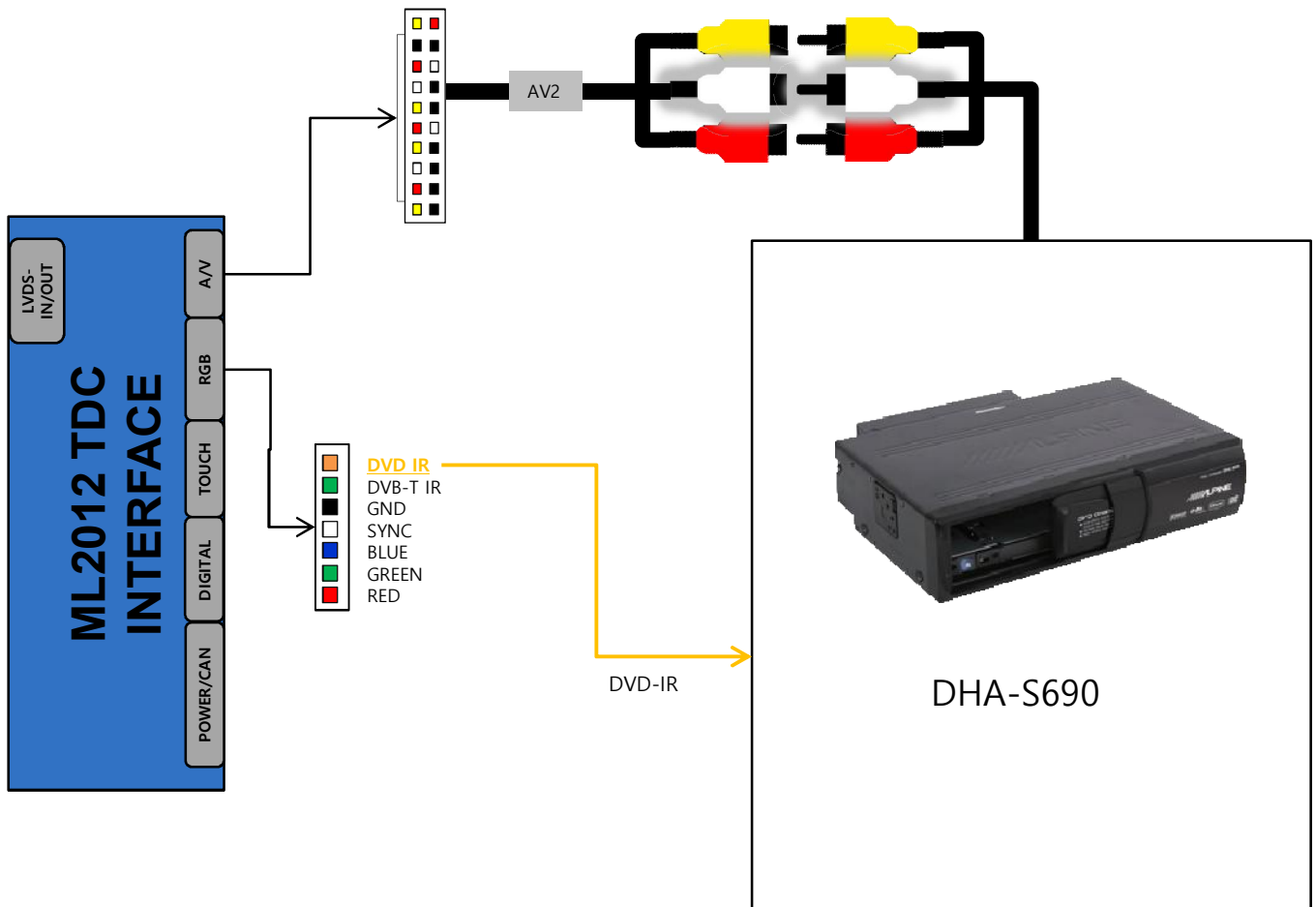
11. Install Manual

2. Installation DVB-T Remote Control Connection



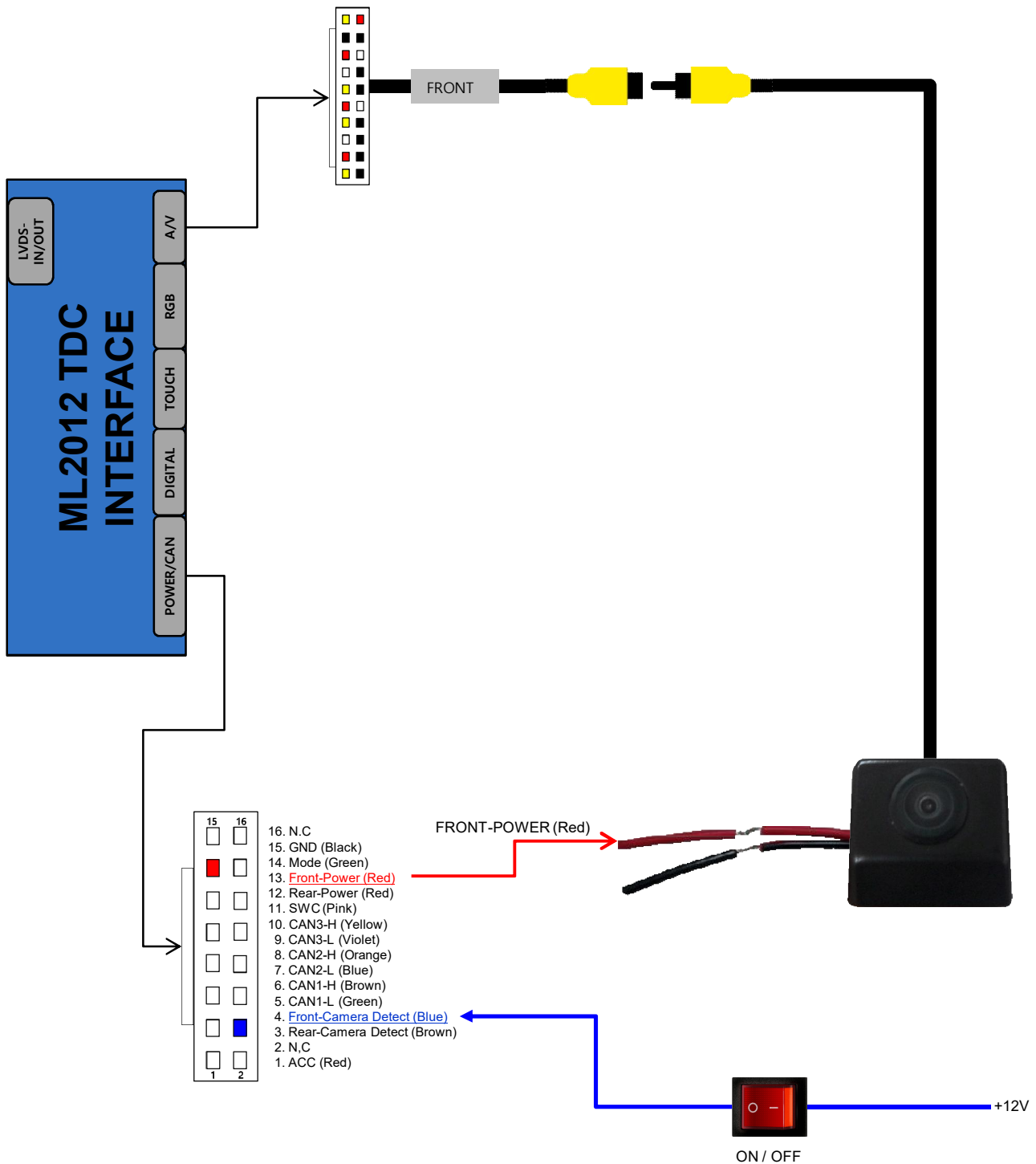
11. Install Manual

3. Installation DVD Remote Control Connection



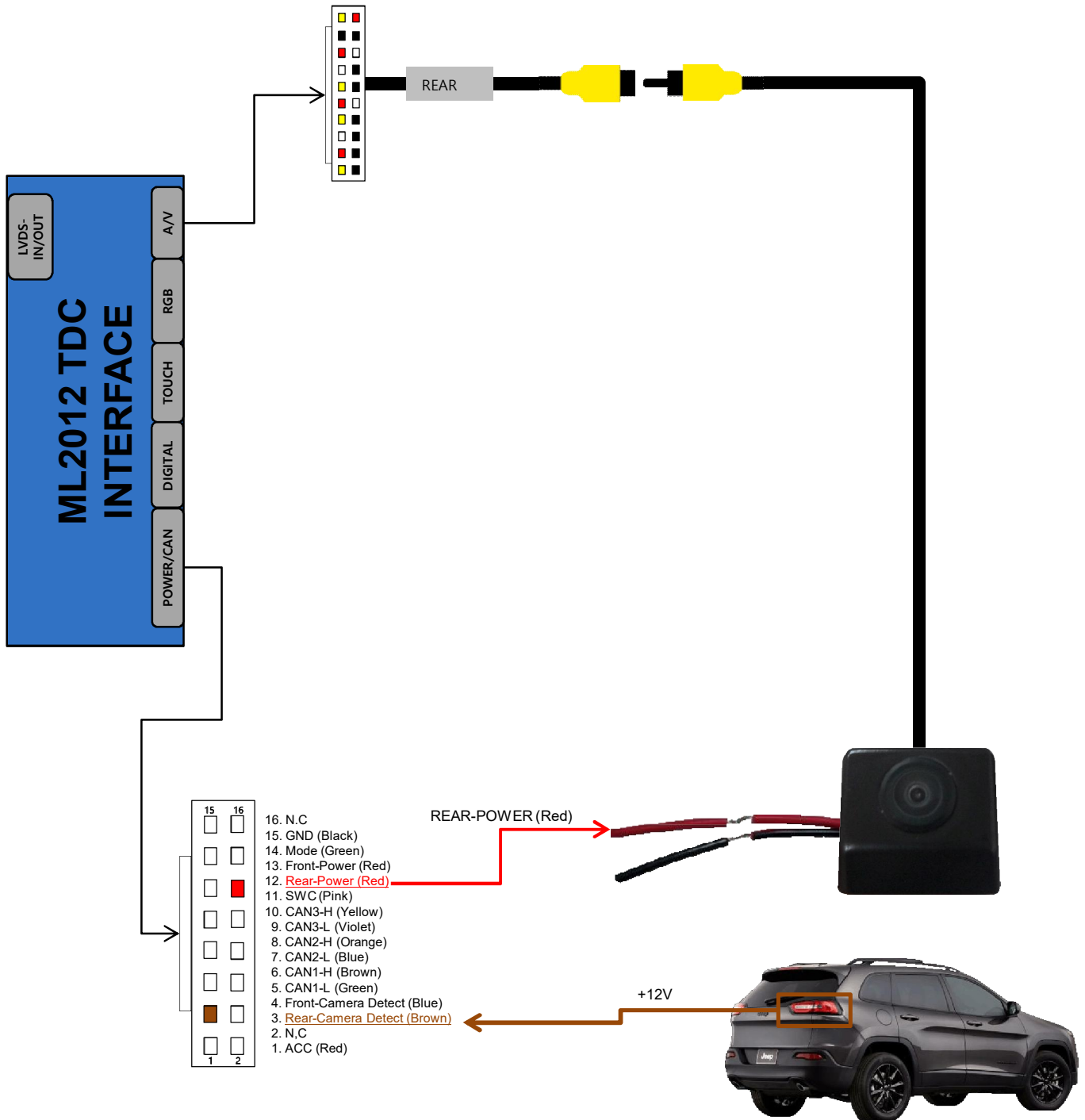
11. Install Manual

4. Installation External Front Camera Connection



11. Install Manual

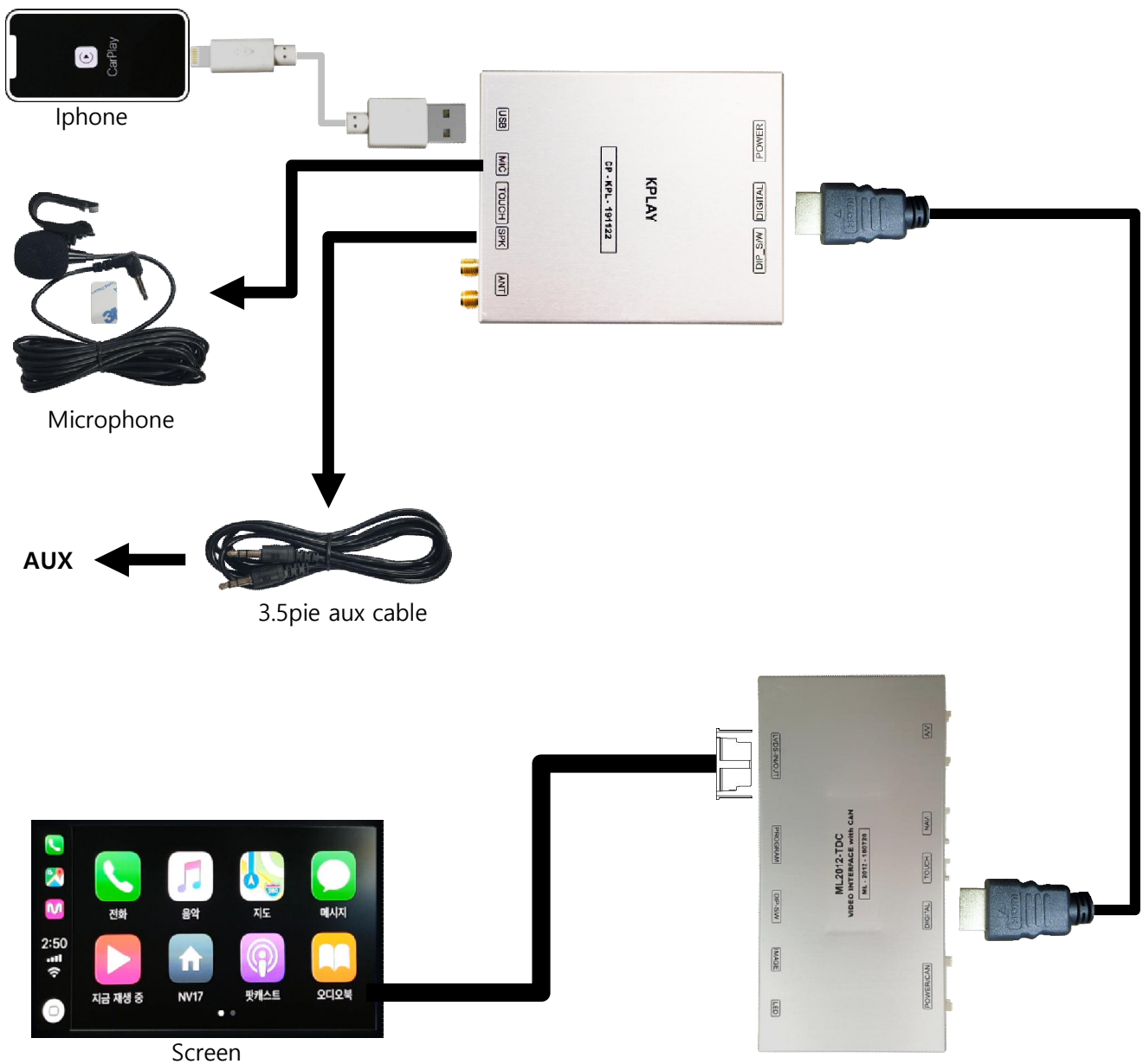
5. Installation External Reverse(Rear) Camera Connection



11. Install Manual

6. Installation CarPlay - KPLAY

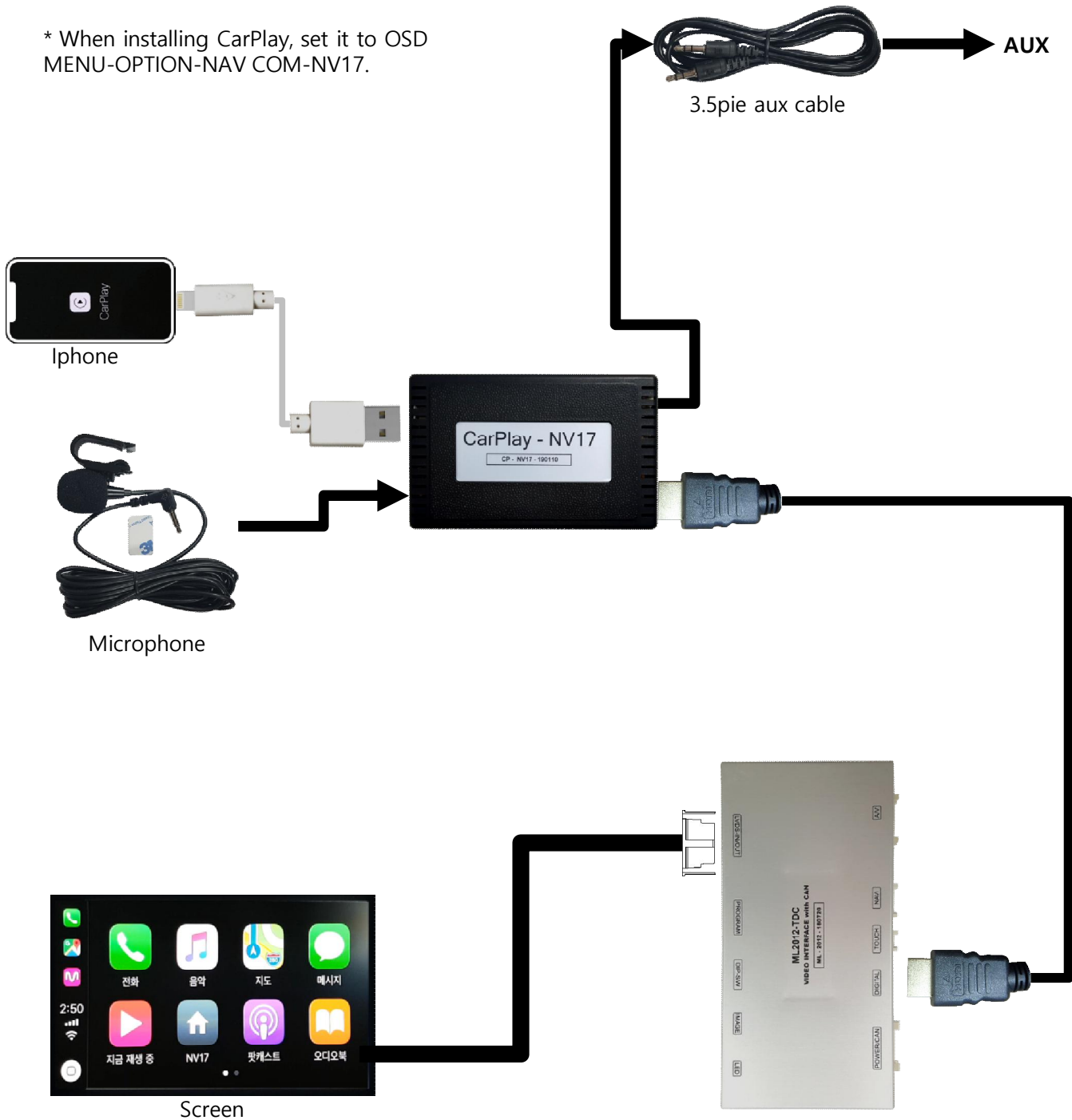
* When installing CarPlay, set it to OSD
MENU-OPTION-NAV COM-KPLAY.



11. Install Manual

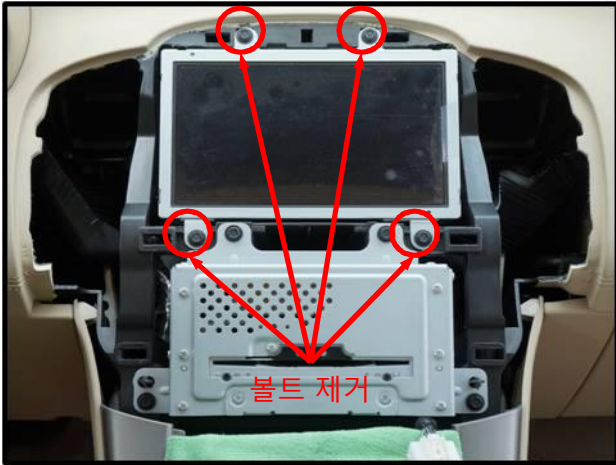
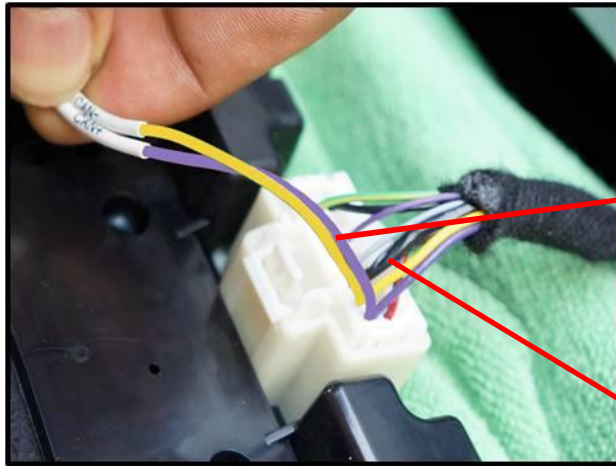
7. Installation CarPlay – NV17

* When installing CarPlay, set it to OSD
MENU-OPTION-NAV COM-NV17.



11. Install Manual

8. Installation - LACROSSE

- (a)  FRONT COVER Desorption.
- (b)  볼트 제거
- (c)  Connect the supplied GVIF cable to the original cable.
- (d)  Connect the provided GVIF cable to the monitor.
- (e)  CAN+ Violet
CAN- Yellow



GU Electronic

11. Install Manual

8. Installation - REGAL

(a)



(b)



(c)



(d)



(e)

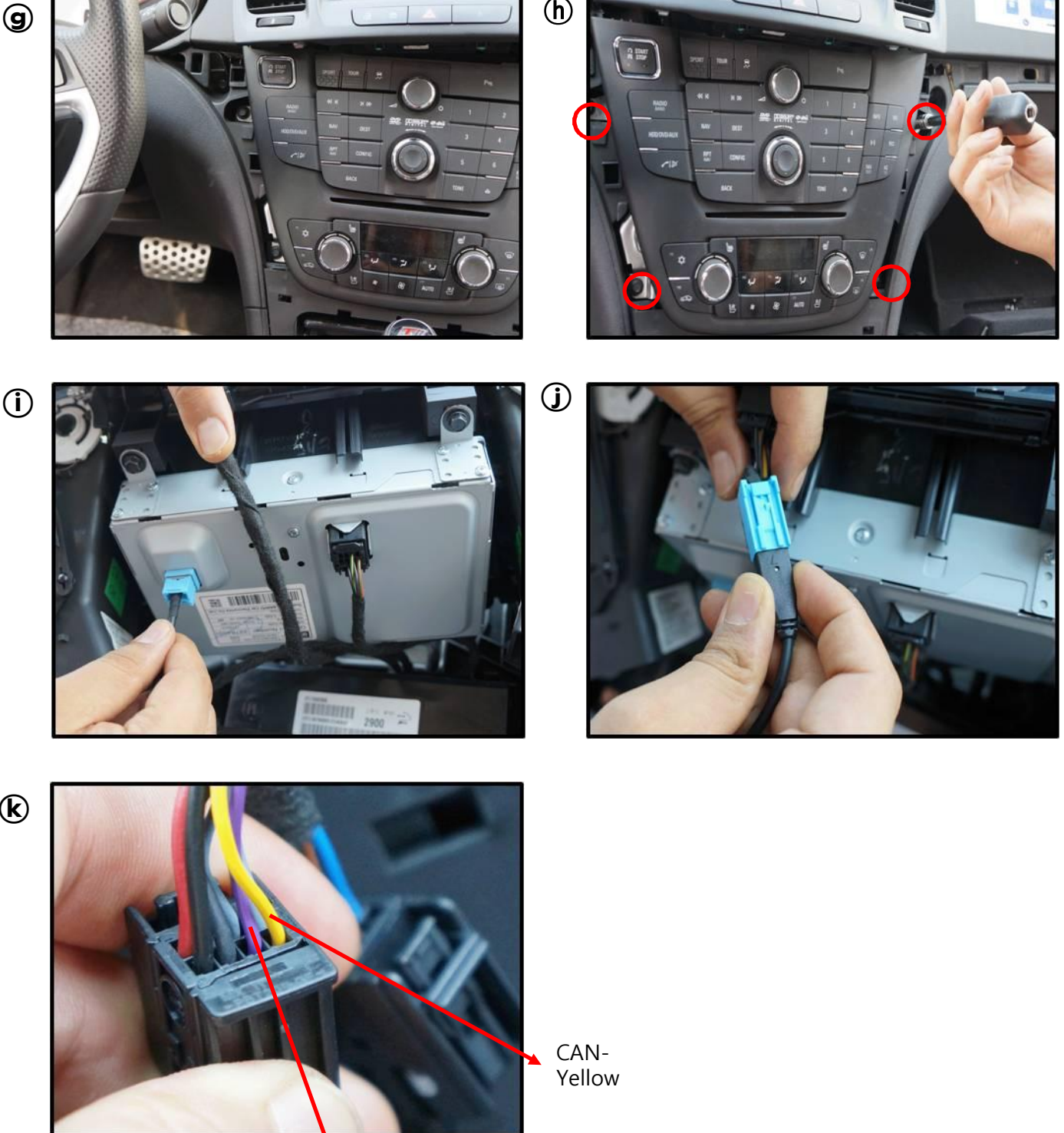


(f)



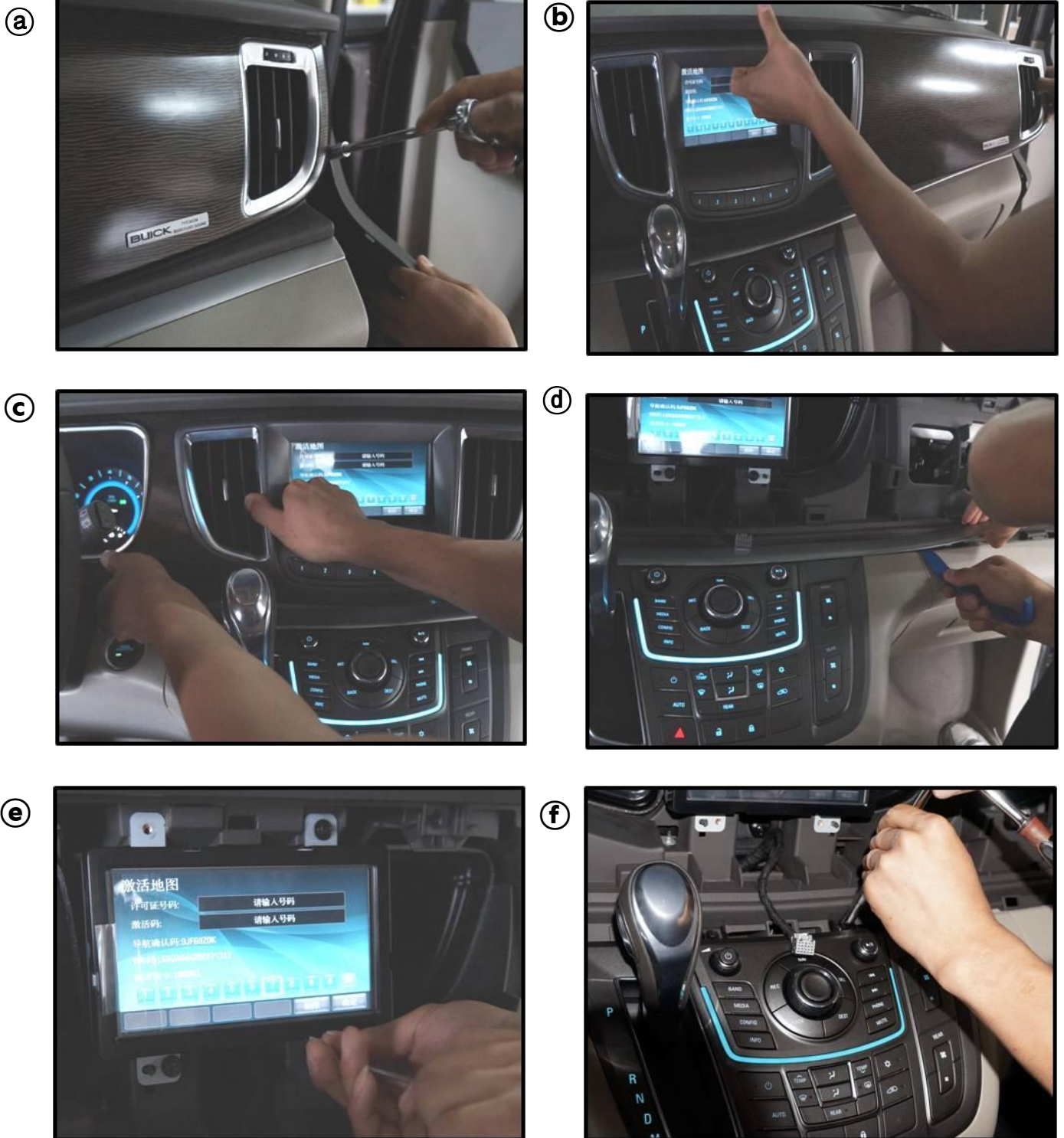
11. Install Manual

8. Installation - REGAL



11. Install Manual

8. Installation – GL8



11. Install Manual

8. Installation – GL8

g



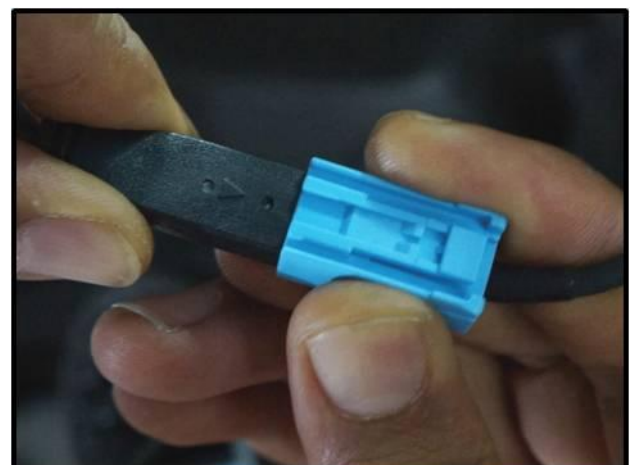
h



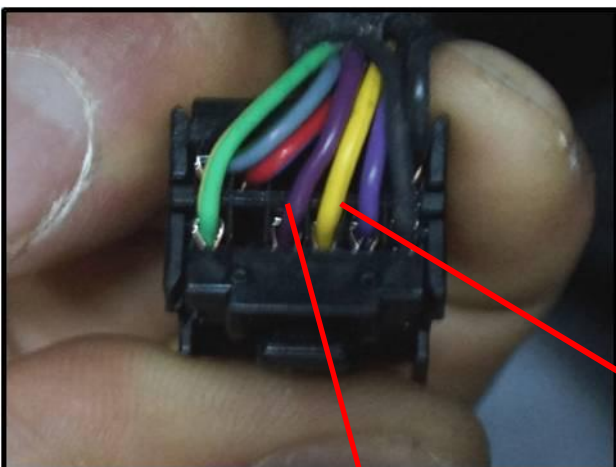
i



j



k



CAN-
Yellow

CAN+
Violet



GU Electronic

11. Install Manual

8. Installation – MALIBU

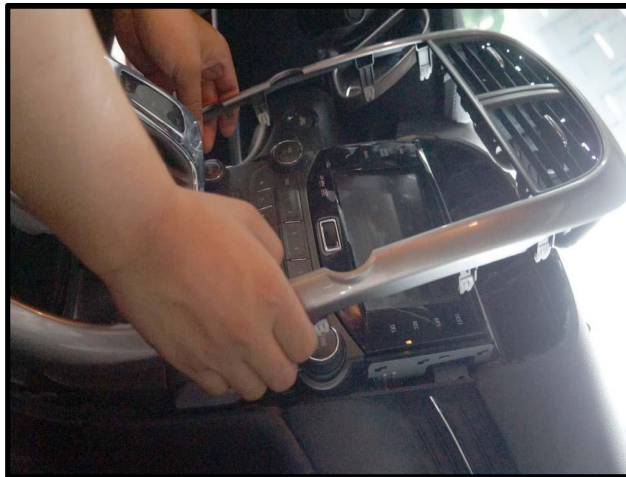
(a)



(b)



(c)



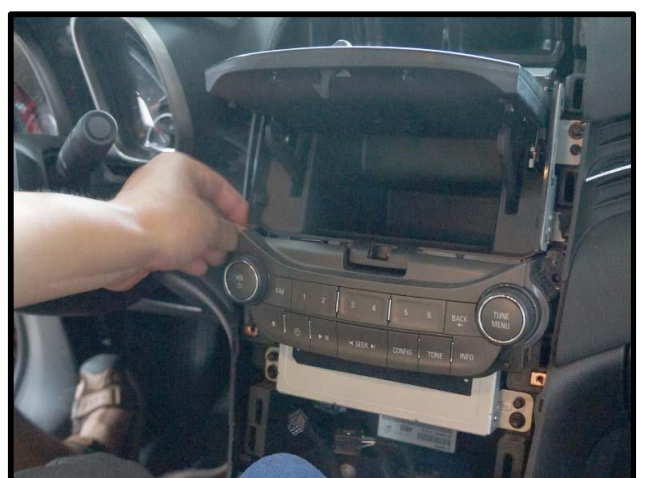
(d)



(e)



(f)

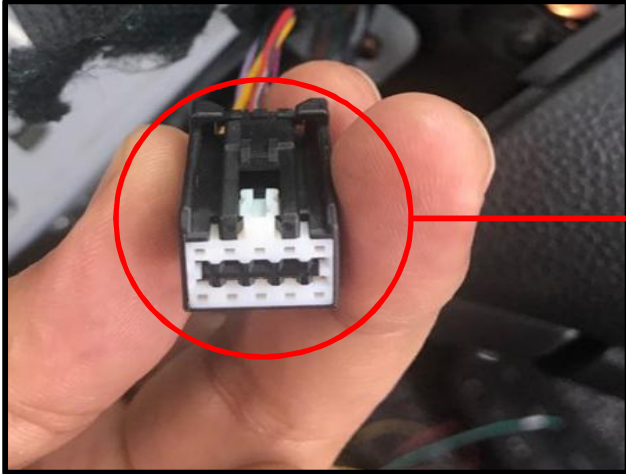


GU Electronic

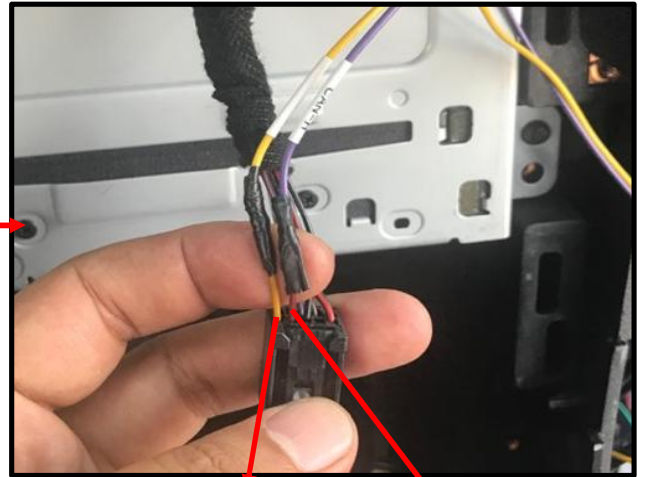
11. Install Manual

8. Installation - MALIBU

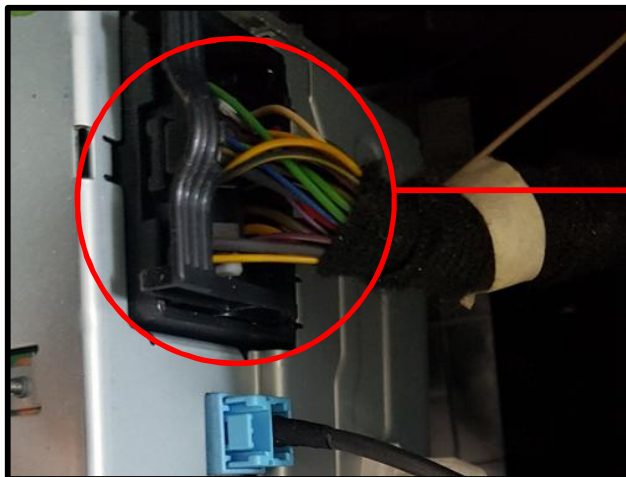
g



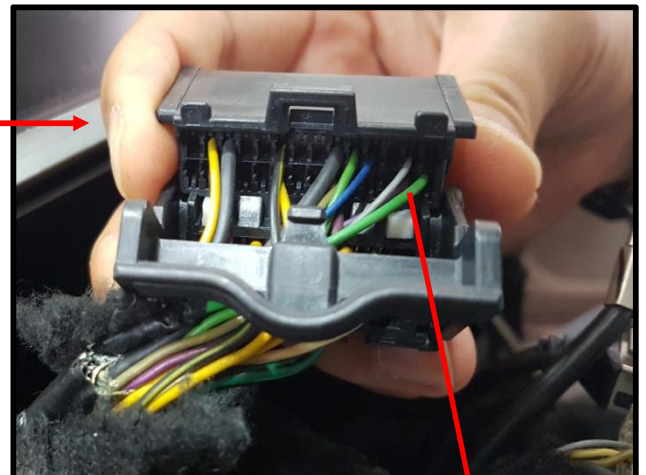
h



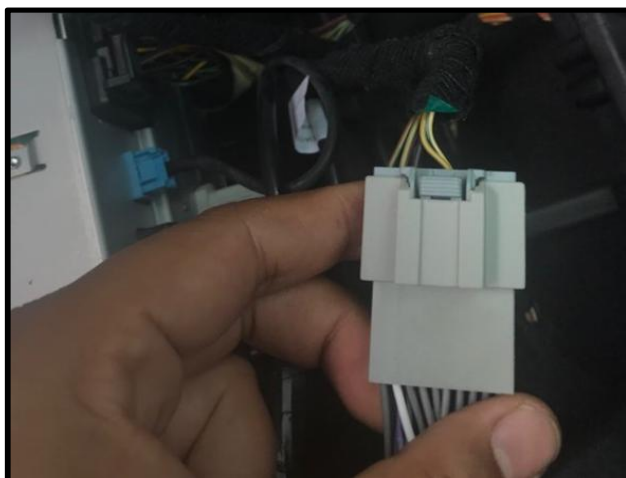
i



j



k



GU Electronic

12. 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
- .