

# Install Manual

## (QPI-BM12)

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# Warning / Caution



## Warning

- When installing the main unit, do not remove or alter existing vehicle fasteners, including nuts, bolts, screw, clips, and fittings. Never detach, move or alter existing vehicle wiring, including electrical grounds and straps. Alteration of existing vehicle components may make vehicle unsafe to operate. Should be no any electronic devices or magnetic pole around installation place.
- Air bags are vital part of a safety system. Never install main unit in a way which will alter air bag wiring or interfere with air bag deployment. Air bags must function properly in the event of an accident.
- Before installing, check the location of pipe, tank, electrical cables and others.
- Read and follow the instruction manual.
- Wiring location must not interfere driving, get in or out from car.
- Use electrical tape to insulate the ends of all wires, even if they are not used. Proper insulation prevents arcs, shocks and fires.
- When installation is complete, test all vehicle electrical systems to ensure they operate correctly, including lights, horn, brake lights, and emergency flashers.
- According to our sales policy, any problems caused by user's mistake, careless can not be guaranteed.



## Caution

- All steps of installation should be done by well-trained specialist.
- During installation ignition key should be taken off and after all installation finish connect power cable with interface for the last step.
- Do not install the main unit in places where it ma be exposed to dew condensation (around the air conditioning hose, etc), or in locations where it may come in contact with water, high levels of moisture, dust or oily smoke
- Install wiring in a manner in which cables will not come in contact with metal parts. The wiring may be damaged by contact with metal parts, resulting in fire and shocks. Avoid all contact with hot surfaces when wiring the main unit. High temperatures may damage wiring, causing shorts, arcing and fires.
- Kindly check all parts are in the box, when receiving the product, if anything missing, inform to the supplier or manufacturer.

# Table of Contents

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1. Specifications	
1.1 Main Specifications .....	4
1.2 Features .....	5
1.3 System Diagram .....	6
1.4 Components .....	7
1.5 Exterior .....	9
2. Installation	
2.1 Installation Diagram .....	10
2.2 Installation .....	11
3. Settings	
3.1 DIP Switch .....	13
3.2 Remote Control .....	14
3.3 Car Model and Navi Model .....	15
3.4 Factory Mode .....	16
3.5 DVD, DTV I-DRIVE input .....	19
3.6 Original Button Usage .....	21
3.7 PIP setup .....	23
3.7.1 POP Set up .....	24
3.7.2 Switch Modes .....	25
3.8 Rear Camera .....	26
3.8 Rear Parking Guidelines .....	27
3.10 OSD .....	30
4. Trouble Shooting .....	32

# 1. Specifications

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## 1.1 Main Specifications

1. Car Compatibility  
BMW New 1,3,5,7 series 6.5'' & 8.8'' & 10.2''
2. Components  
Interface\* 1EA
3. MULTIMEDIA INTERFACE input specification
  - 3 \* A/V input (video external input)
  - 1 \* CVBS(Rear Camera) input
  - 1 \* Analog RGB input (Navigation system output)
  - 1 \* LCD input (Car system input)
4. MULTIMEDIA INTERFACE output specification
  - 1 \* LCD output
5. Power specification
  - Input power : 8VDC ~ 18VDC
  - Consumed power : 5WATT
6. Switch input mode
  - External display skip function : through DIP switch, can control each video input
  - Through remote control, can change input mode
  - Through CAN or rear lamp cable, rear camera can be detected

# 1. Specifications

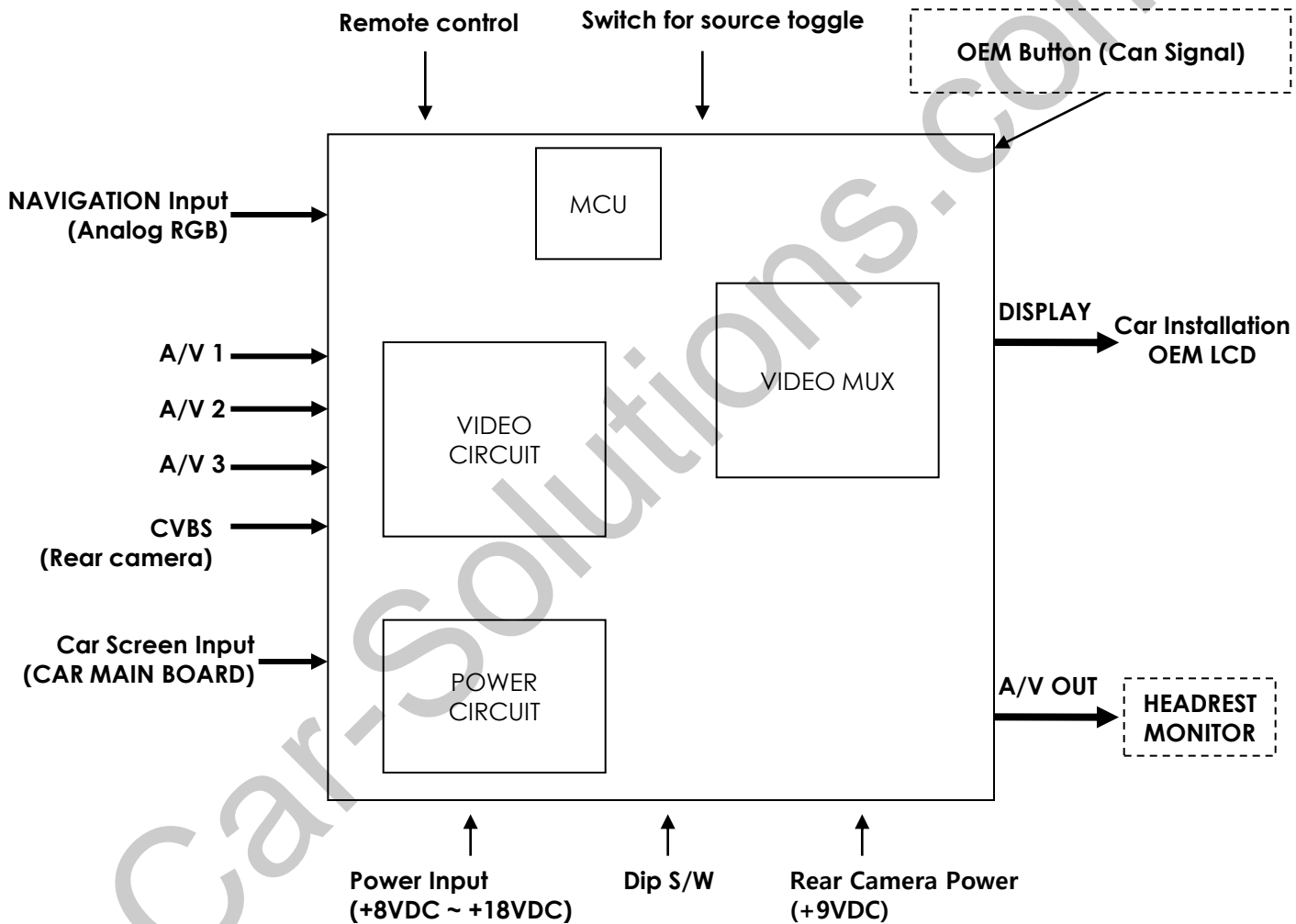
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## 1.2 Features

- Easy installation through connection with commander
- Able to control NAVI, DVD, DTV function by using I-Drive Controller
- Able to adjust DVD, NAVI display on screen
- Improved Screen Display (user-oriented interface)
- Mode change through original button (I-DRIVE MENU BUTTON)
- Provide power cable to connect with rear camera
- Support PIP display – show original Navi and other source display at the same time (Picture in Picture)
- Dynamic PAS(Parking assistance system), moving parking line according movement of steering wheel

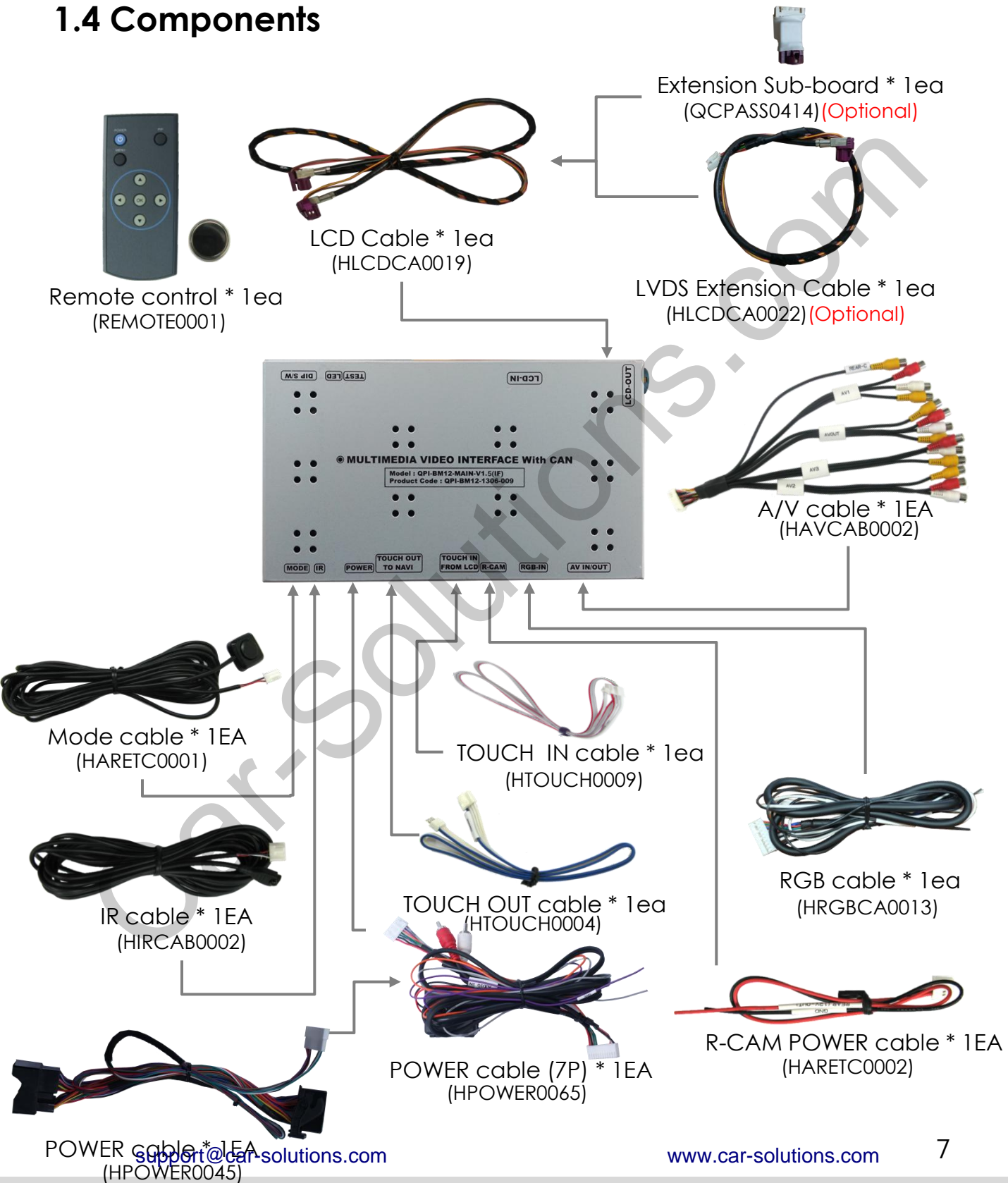
# 1. Specifications

## 1.3 System Diagram



# 1. Specifications

## 1.4 Components



# 1. Specifications

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## 1.4 Components



10.2" Touch Panel  
(TOUPAN0002)

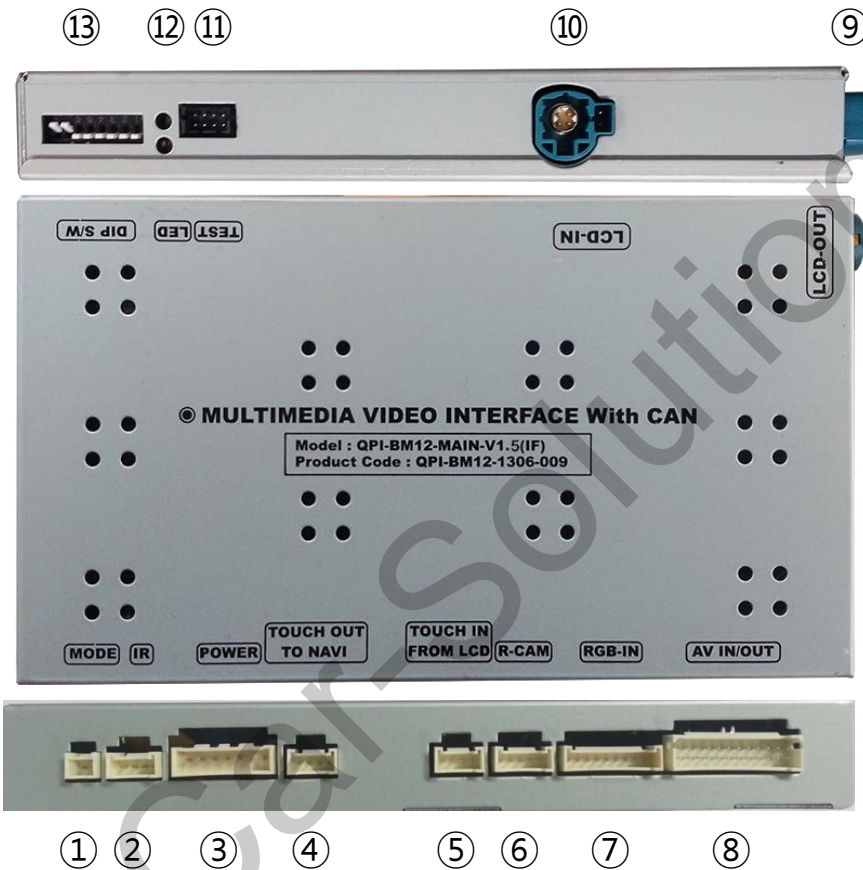


8.8" Touch Panel  
(TOUPAN0012)



# 1. Specifications

## 1.5 Exterior



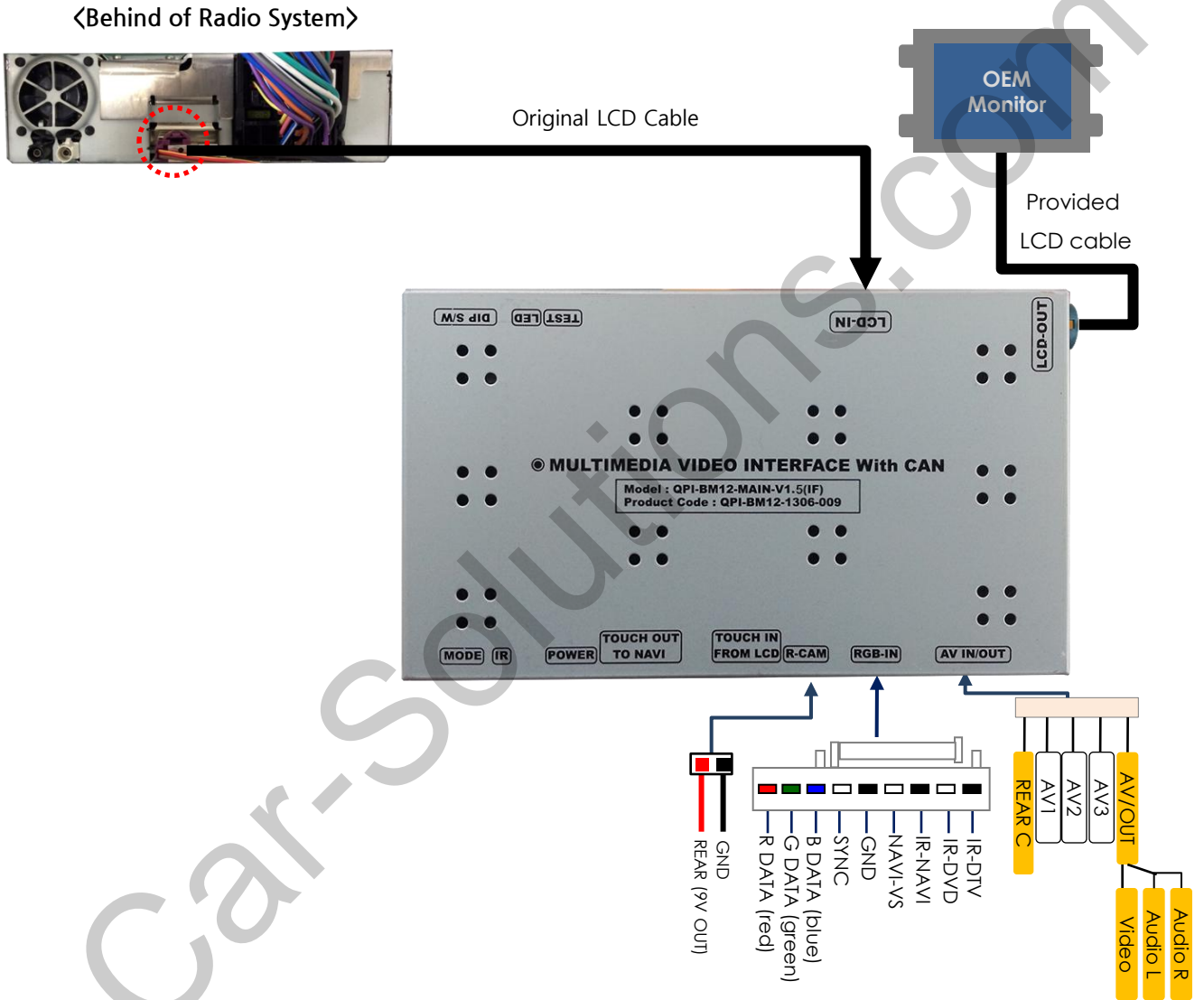
### Dimension

Width 150.4mm  
Length 99.4mm  
Height 2.3.2mm

- ① MODE
- ② IR
- ③ POWER
- ④ TOUCH OUT TO NAVI
- ⑤ TOUCH IN FROM LCD
- ⑥ R-CAM
- ⑦ RGB-IN
- ⑧ AV IN/OUT
- ⑨ LCD-OUT
- ⑩ LCD-IN
- ⑪ TEST
- ⑫ LED
- ⑬ DIP S/W

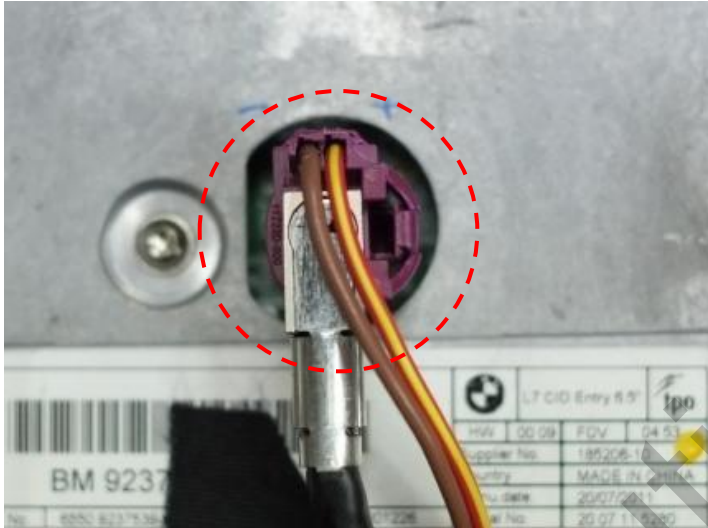
# 2. Installation

## 2.1 Installation Diagram



# 2. Installation

## 2.2 Installation / Monitor and Interface connection



- ① See left picture, Remove original LCD cable from monitor and connect with provided LCD cable.

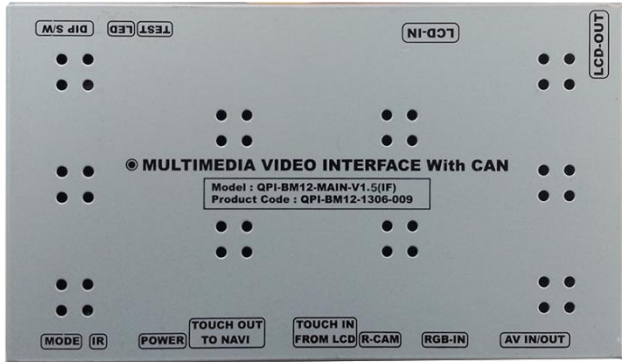


- ② Connect the original LCD cable with LCD-IN on the interface.

**※ Precaution : Do not connect power cable with accessory power, connect with backside of command or cigar jack.**

# 2. Installation

## 2.2 Installation / connect Power cable

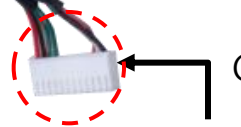


<Interface>

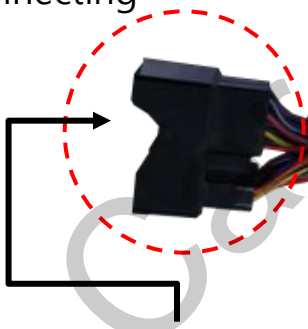
Connect with Interface



Connecting



Connecting



Connecting

※ Plug & Play without fiber optic cables  
- You are required to connect original fiber optic cables to the supplied plug & play connector



<Original Cable>

Example



<Behind of Radio System>

※ Connect original cable after taking out from Radio system [support@car-solutions.com](mailto:support@car-solutions.com) [www.car-solutions.com](http://www.car-solutions.com)

# 3. Settings

## 3.1 DIP Switch

- ※ Example DIP S/W usage
  - Use input mode : A/V2, A/V3
  - Use original navigation
  - External rear camera



※ **ON : DOWN / OFF : UP**  
**Default : DIP S/W 8 OFF**

- ▷ DIP S/W : 1,2 → ON (hide INPUT MODE)
- ▷ DIP S/W : 3 → OFF (A/V2 display)
- ▷ DIP S/W : 4 → OFF (A/V3 display)
- ▷ DIP S/W : 5 → OFF (8.8" & 10.2")
- ▷ DIP S/W : 6 → OFF (Standard GUI model)
- ▷ DIP S/W : 7 → ON (display external rear cam)
- ▷ DIP S/W : 8 → OFF

<i>PIN</i>	<i>Function</i>	<i>Dip S/W Selection</i>
1	Displaying RGB input	ON : RGB mode skip OFF : RGB mode display
2	Displaying A/V 1	ON : A/V 1 mode skip OFF : A/V1 mode display
3	Displaying A/V 2	ON : A/V 2 mode skip OFF : A/V2 mode display
4	Displaying A/V 3	ON : A/V 3 mode skip OFF : A/V3 mode display
5	Setup of monitor size	ON : 6.5" OFF : 8.8", 10.2"
6	Setup of Rear camera mode (F20) *** F56 is not applicable	ON : 3D GUI model OFF : Standard GUI model
7	Setup of rear camera use	ON : CVBS4 OFF : MAIN
8		N.C

※ In Case of New 2Series, X3,X4, New X-Series(8.8"), i8 should be set Dip S/W #5, #6 to Down

※ Please make sure to disconnect the power cable of the interface and reconnect the power cable again to apply the dip switch setting whenever changing DIP switch. Otherwise, DIP switch setting will not be applied.

# 3. Settings

## 3.2 Remote Control



<i>Key</i>	<i>Function</i>
POWER & PIP	Unavailable
MENU	Activating OSD menu
OK	Making a selection, changing image display
▲	Moving upward
▼	Moving downward
◀	Moving leftward (If you press this button 2 seconds long, you can access the factory mode.)
▶	Moving rightward (If you press this button 2 seconds long, you can reset all the data about user environment.)

# 3. Settings

## 3.3 Car Model and Navi Model

FACTORY mode – Press ◀ button 2 seconds long on the remote control.

### ▪ Setup for car model



### ▪ Setup for navigation



#### ☐ UTIL1 - CAR MODEL

Selecting model of the car

F20 : 1, 3, 5, 7 series 6.5" & 8.8"

New UI 8.8" 10.2"

F56 : New MINI, New X3 6.5"

F20 NEW : 1, 3, 5, 7 series 6.5" & 8.8" 2016 ~

F56 NEW : New MINI, New X3 6.5" 2016~

**\*Select the New model if having a problem of screen flicking with cars after Oct 2016.**

#### ☐ UTIL1 – NAVI MODEL

Select navigation model

DEFAULT

LS901

PAPAGO

QROI

KD900

ACCLASS

GI5000A

GI8000N

HDMI

WP9200

MYVI

NAV\_506TP

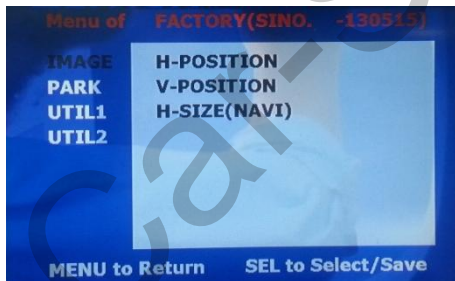
ICUBE

GN\_3000

NAVIST

PAPAGO

SMITH\_PAD



#### ☐ IMAGE

Adjust navigation position and size

H-POSITION : Move display horizontally

V-POSITION : Move display vertically

H-SIZE : Adjust navi size horizontally

**\* Go into FACTORY/ IMAGE (as shown right) and adjust the position and the size of the navigation after setting the definition of the navigation**

# 3. Settings

## 3.4 FACTORY Mode

FACTORY mode – Press ◀ button 2 seconds long on the remote control.



### UTIL1 – AVOUT SELECT

Selecting background sound  
After  
returning navigation or original  
mode

DEFAULT : Selecting AV sound  
just before changing  
navigation or original mode  
from the AV mode

AV 1~3 : Sound of the selected  
AV source 1~3

### UTIL1 - FACTORY RESET

FACTORY MODE RESET



# 3. Settings

## 3.4 FACTORY Mode

FACTORY mode – Press ◀ button 2 seconds long on the remote control.



### UTIL2 - I\_DRV REMOTE

Choose DTV and DVD model to be control I\_DRV function

LI-1DISC  
NEC-6DISC  
USER(when using IR MEMORY)

- Select DVD model: Setting on AV1 Mode
- Select DTV model : Setting on A/V2 mode

### UTIL2 - I\_DRV CONTROL

Selecting whether to use I\_DRV function or not

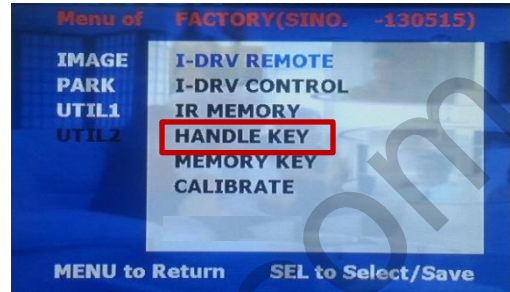
ON / OFF

A/V1 : Control DVD Remote control UI  
A/V2 : Control DTV Remote control UI

# 3. Settings

## 3.4 FACTORY Mode

FACTORY mode – Press ◀ button 2 seconds long on the remote control.

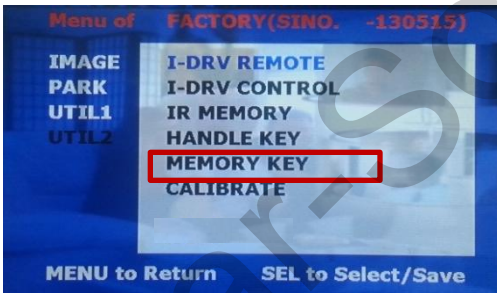


### UTIL2 – IR MEMORY

To register DVD, DTV remote control, the remote control value must be registered and can be control with I-Drive  
DVD(A/V1), DTV(A/V2)

※ To use this function, in UTIL2-I\_DRV REMOTE select USER mode

DVD / DTV



### UTIL2 – MEMORY KEY

Whether to use car audio button #8 (mode change + aux change : F20)

ON / OFF

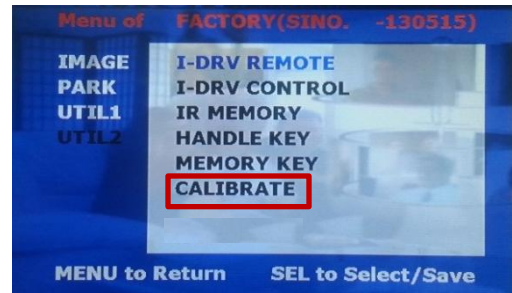
\* F56 : #6 ON / OFF

### UTIL2 – HANDLE KEY

Whether to use voice button on handle for mode change



ON / OFF



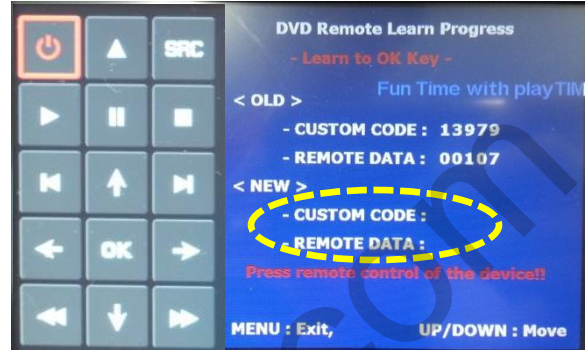
### UTIL2 – CALIBRATE

Touch Calibration

YES / NO

# 3. Settings

## 3.5 DVD, DTV IR MEMORY input



- ① First of all, press ◀ button on remote controller 2 seconds long or press UP→DOWN→UP→MENU button in order to access Factory mode. Choose IR MEMORY on UTIL2.

In IR MEMORY, you can choose AV source of DTV and DVD you want to use.

- ② Picture above shows DVD remote control button value input, select menu you want to save. (To register DVD remote control button value, select IR MEMORY – DTV and follow below instructions.

Example)

- a. After select OK button on OSD menu, press intended I-Drive button
- b. Indicated part above will flicker, and press POWER on DVD remote control.  
(continue to next page)

### What is IR-MEMORY Mode?

Is to allow I-Drive and touch screen to control other DVD or DTV (besides the existing,; for example : SANYO, NECVOX) by register remote control value.

# 3. Settings

## 3.5 DVD, DTV I-DRIVE input



example) continued..

c. The values that you registered will appear as green text in the marked area on pressing the button. And the values will be saved automatically.

d. Register remain buttons' value in OSD menu like the above-mentioned.

③ After register, select "SRC" button in OSD menu. Then you can see confirmation window as shown above. At the moment, (If data is saved, DVD TYPE and DTV TYPE will be changed to "USER" automatically.)

If you see "SUCCESS" on screen, the data is saved clearly and you can control DVD via touch screen. BUT, you MUST change the option in FACTORY-UTIL2-I\_DRV REMOTE to "USER".

※ When touch the screen, you can control DVD, DTV using remote control UI via touch screen or I-Drive

(6.5" monitor – Touch the middle of the screen,  
8.8", 10.2" monitor – Touch the left side of the screen)

※ If touch the screen in DVD(A/V1), DTV(A/V2) mode, Can see remote control UI  
If touch the screen in RGB(HDMI), A/V3 mode, Can see mode switching UI


- If you want to see mode switching UI in DVD, DTV mode, Select "SRC" button



# 3. Settings

## 3.6 Original Button Usage/ 6.5"




<i>Mode</i>	<i>Key</i>	<i>Operation</i>	<i>Function</i>
Whole Mode	TEL	Press longer	Change mode
		Press shorter	Go back to original image
	MENU	Press shorter	Making Selection
	Audio Button #8	Press shorter	Change mode + Change Car AUX
Reverse mode	 (Steering wheel)	Press shorter	Operate PIP function

# 3. Settings

## 3.6 Original Button Usage / 8.8”



**I-Drive Button (8.8”)**

<i>Mode</i>	<i>Key</i>	<i>Operation</i>	<i>Function</i>
Whole mode	MAP	Press longer	Change mode
		Press shorter	Go back to Original image
	MENU	Press shorter	Select
	 Audio Button #8	Long press	Change mode
	Audio Button #8	Press shorter	Change mode+ Change Car Aux
RGB(HDMI) AV1 AV2 AV3	▽	Push longer this button in the direction of 6 O'clock	Operate PIP function
Reverse Mode	▽	Push longer this button in the direction of 6 O'clock	Operate PIP function

# 3. Settings

## 3.7.1 PIP Setup

Can watch original mode with external input in RGB(When select HDMI) Or A/V1~3 mode

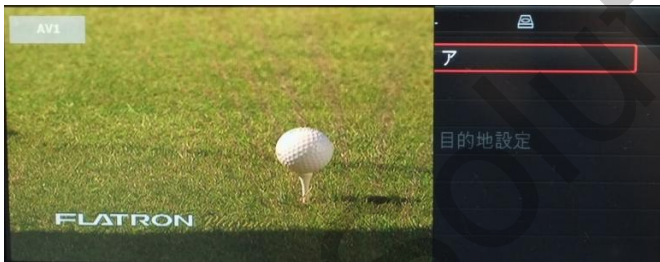
- 6.5" Monitor : Press shorter voice button in steering wheel
- 8.8", 10.2" Monitor : Push down longer I-Drive

※ Full screen → PIP Screen<1> → PIP Screen<2>



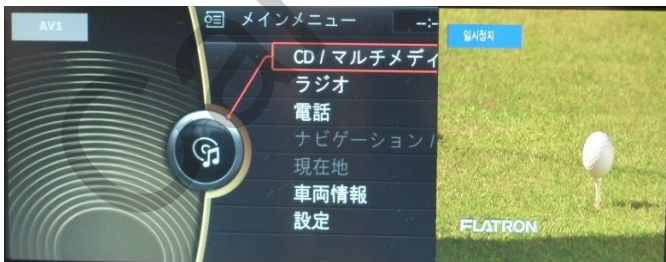
External mode-Full screen

User can watch external mode as full screen



PIP screen<1>

User can watch external mode wider than original mode



PIP Screen<2>

User can watch original mode wider than external mode

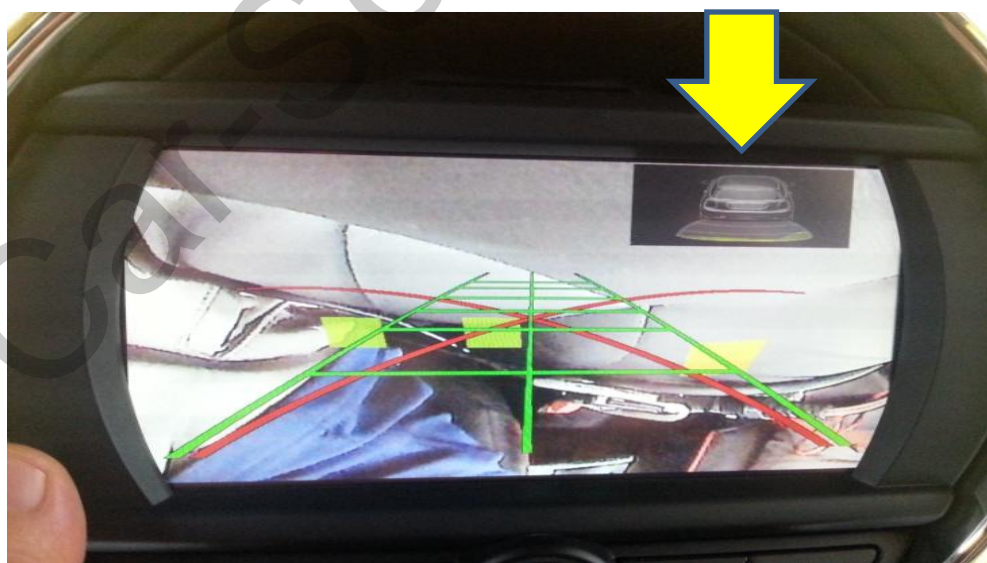
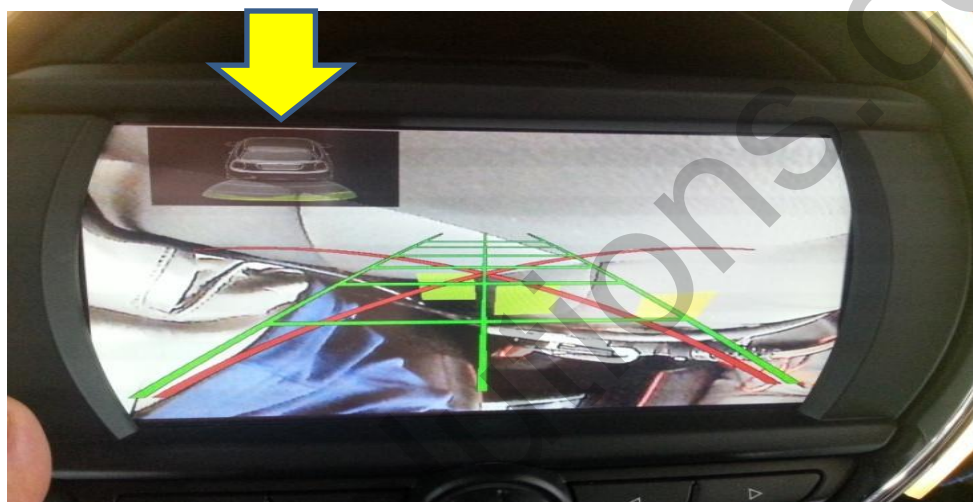
※ Only use RGB mode when select HDMI model

# 3. Settings

## 3.7.2 POP(Picture on Picture) - MINI with 6.5"

※ Only MINI with 6.5" has a POP function.

☞ Short press  Voice button in rear camera mode  
: Shift the position of POP





# 3. Settings

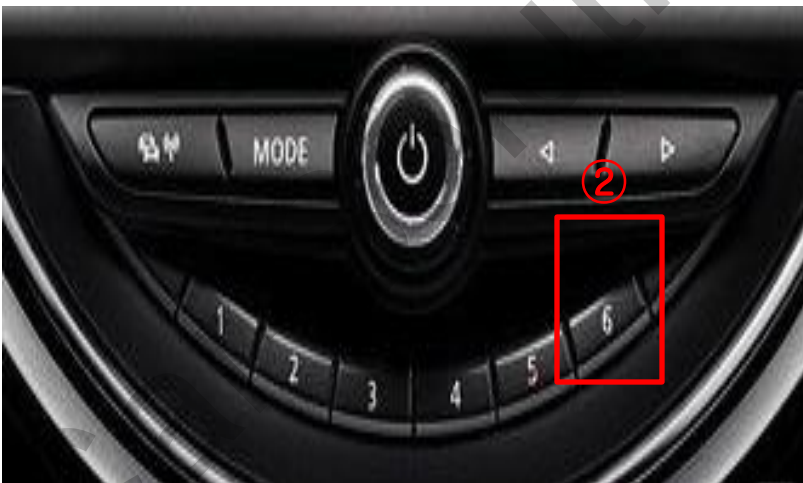
## 3.7.3 Switching modes

☞ Long press  Voice button(Refer to Page 19)

☞ Car Audio Button (Quick Button) : Press Number 8 button - ①



☞ Car Audio Button Quick Button : Press Number 6 button (F56)-②



❖ **BMW X1 is not applicable to switch modes with any Audio Buttons(Quick buttons)**

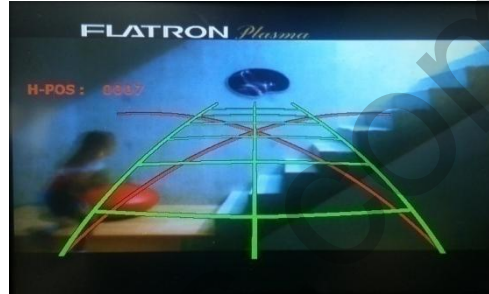
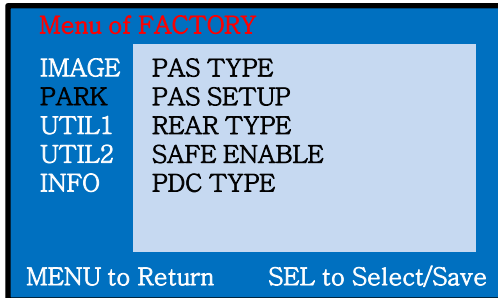
❖ **Quick button will allow you to switch Video and Sound signals simultaneously.**

# 3. Settings

## 3.8 Rear Camera

**FACTORY mode** – Press ◀ button 2 seconds long on the remote control.

※ After installing rear camera : DIP S/W #7 must be put down (ON). Refer to page 9.



### □ PARK

**PAS TYPE** : Selecting Type of parking guide line

- NOT USED : Not use Parking guide line
- PAS ON : Selecting Dynamic Parking guide line
- PAS OFF : Selecting fixed Parking guide line

**PAS SETUP** : Adjusting the position of the parking guide line (available in PARK SETUP-> V-POSITION, H-POSITION)

**REAR TYPE** : Choose rear camera recognition

- \* LAMP - Detecting the rear view camera via rear lamp (Installer must connect "Rear-C" cable of the power cable to the rear lamp of the car.)
- \* CAN - Detecting the rear view camera by CAN signal (Installer must connect "CAN" cable of the power cable to the "CAN" cable of the car.)

**SAFE ENABLE** : If your car is connected with CAN cable and it is in "ON" state, you can NOT watch DVD or A/V except original image or navigation while driving. At that time the screen use only main and navigation(default : OFF)

**PDC TYPE** : When PDC mode, Selecting screen ratio

- \* OEM CAM : The car has original camera and install external camera
- \* EXT. CAM : The car doesn't have original camera and install external camera
- \* 15Y HARMAN : When original PDC is located in middle of the screen

a. If you want to get to the FACTORY mode, set the gear as rear state and press "LEFT" button 2 seconds long on the remote control or the keypad. (as shown left top)

# 3. Settings

## 3.8.1 Rear Camera / 6.5"

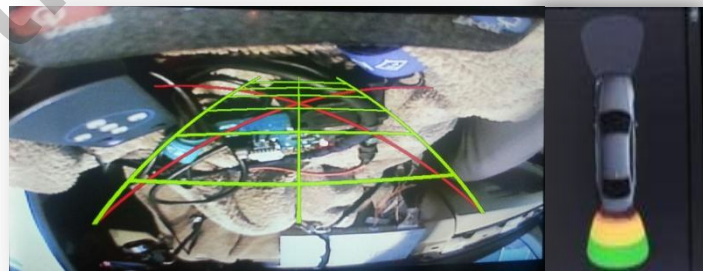
### Rear display setting



Press shortly on steering wheel, to select rear camera screen and POP screen

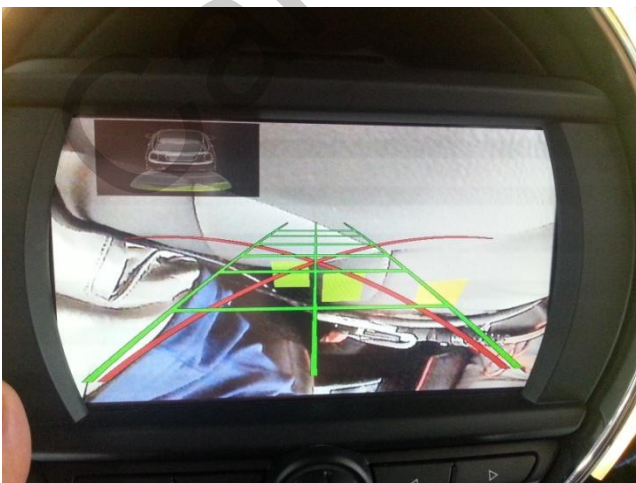


< Rear camera full screen >



< PIP screen >

## 3.8.1 Rear Camera / MINI with 6.5"



Short press  Voice button :  
- Shift the position of POP

# 3. Settings

## 3.8 Rear Camera / 8.8"

### Rear display setting



Push down about 2 seconds long on I-Drive and select mode



< Rear camera full screen >



< PIP screen >

※ For 3D PDC, set DIP S/W 6 ON



< Rear camera full screen >



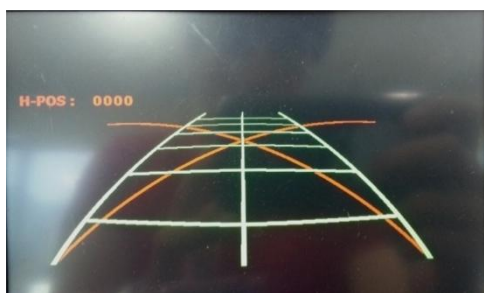
< PIP screen >

# 3. Settings

## 3.9 Rear Parking Guidelines

Go to Factory Menu, choose PAS SETUP, by using OK button change H-POS → V-POS

### □ H-POS



In H-POSITION, use ◀, ▶ on remote control, to adjust parking guideline left and right.

### □ V-POS



In V-POSITION use ▲, ▼ on remote control, to adjust parking guideline up and down.

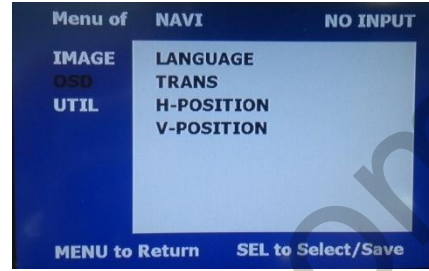
# 3. Settings

## 3.10 OSD (On Screen Display) / Analog RGB Mode



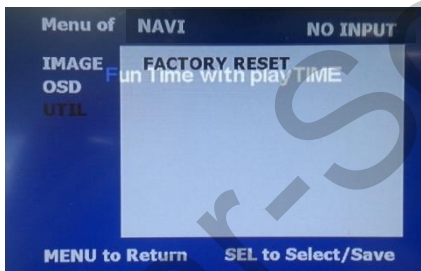
### □ IMAGE

- \* BRIGHTNESS
- \* CONTRAST
- \* SHARPNESS



### □ OSD

- \* LANGUAGE : Set OSD language (only support English and Chinese)
- \* TRANS : Adjust OSD transparency
- \* H-POSITION : Move OSD horizontally
- \* V-POSITION : Move OSD vertically



### □ UTIL

- \* FACTORY RESET  
: Factory reset only for OSD function  
(unable reset video position)

# 3. Settings

## 3.10 OSD (On Screen Display) / Video Mode

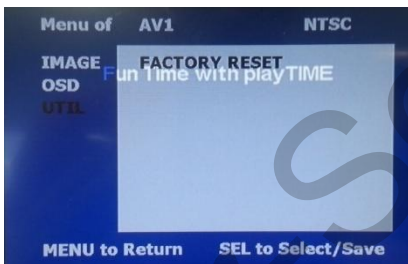


### □ IMAGE

- \* BRIGHTNESS
- \* CONTRAST
- \* SATURATION
- \* HUE
- \* SHARPNESS

### □ OSD

- \* LANGUAGE : Set OSD language (only support English and Chinese)
- \* TRANS : Adjust OSD transparency
- \* H\_POSITION : Move OSD horizontally
- \* V\_POSITION : Move OSD vertically



### □ UTIL

- \* FACTORY RESET  
: Factory reset only for OSD function (unable reset video position)

# 4. Trouble Shooting

---

**Q. I cannot change mode**

- A. Check connection of Ground cable and IR Cable.  
Check LED lamp is on, if not check connection of POWER cable.

**Q. All I got on the screen is black.**

- A. .Check second LED lamp of the interface is on, if not, check A/V sources connected are working well.  
(Second lamp indicates AV sources connected works well.) Check interface connection has been done well.

**Q. Displayed image color is not proper (too dark or unsuitable color)**

- A. Try to select "INITIAL" in OSD menu, if it does not work, inform to manufacturer.

**Q. I cannot watch the rear camera on the screen**

- A. Set the DIP switch #7 as state "ON".

**Q. Set mode not appear**

- A. Check DIP Switch.

**Q. OEM image is not displayed.**

- A. Check interface's LCD In/Out cable connection. If the status keeps on, inform to manufacturer.

**Q. Screen only displays white color.**

- A. Check LCD out cable is connected well, if this status keeps, inform to manufacturer.

**Q. Show PIP function via handle button, and original screen appear half only.**

- A. This is not because of faulty interface, please check original monitor split function settings.

**Q. After connect CAN cable, set gear "P", video doesn't appear.**

- A. Go to "FACTORY MODE" and check "UTIL-Rear Select". Change "LAMP" settings to "CAN" with remote control.

※ LAMP : In case of connecting "Rear-C" wire of Power Cable to Rear Lamp in vehicle.

It may not work on a camera with 12V