

PIP-BMW 2009

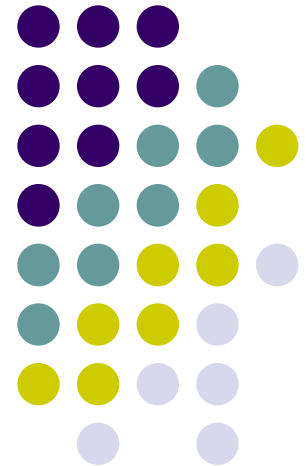
Specification & Installation

(HSD Type)

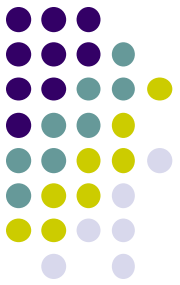
* Last Update : 25th.June.2010



- . MODEL: PIP-BM09-N3-V3.0
- . P/N : PIP-BM-0902-000

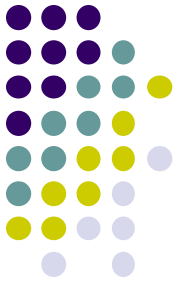


INDEX



- . PIP BMW 09 Feature	3
- . Precaution	4
- . Main Spec	5
- . System composition diagram	6
- . Dimension	7
- . External Appearance	8
- . Connector Pin Assignment	10
- . DIP SW Setting	12
- . How to use remote	13
- . How to use keypad	14
- . Original buttons (E60).....	15
- . Original buttons (F series).....	16
- . OSD(On Screen Display).....	17
- . Rear parking guide line	23
- . Product Composition	25
- . Installation Diagram	26
- . Installation Manual	27
- . Installation Q & A	30

-PIP BMW 09 Feature

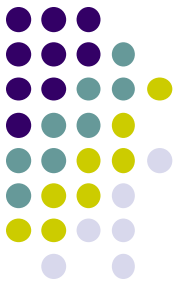


- Clear quality view
- NTSC, PAL Auto detection
- AV source switching thru genuine button in vehicle.
- Convenient use by remote & keypad
- SAFETY function

***Safety function (Safe mode)**

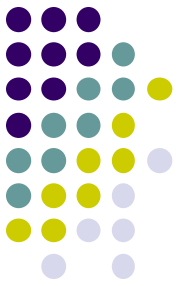
When this function is operated, the screen does not display any AV source's image.
User can control this function by UP button of Remote or OSD keypad

-Precaution



- Ignition key should be taken off before starting installation, interface power connection must be the last step in installation.**
- Power cable should be separated when connecting interface.**
- Should be no any electronic devices or magnetic pole around installation place.**
- All steps of installation should be done by well-trained specialist.**
- Dismantling without manufacturer's permission can not be guaranteed, (No permission to break attached label on the board.)**
- Kindly check all parts are in the box, when receiving the product, if anything missing, inform to the supplier or manufacturer.**
- According to our sales policy, any problems caused by user's mistake, careless can not be guaranteed.**

-Main Spec.



1. Input Spec. (MULTI VIDEO INTERFACE)

- 3 x A/V Input (External video source).
- 1 x CVBS(REAR CAMERA) Input. (Rear camera source)
- 1 x Analog RGB Input (Navigation System output)
- 1 x LCD Input (Car system Input)

2. Output Spec.

- 1 x LCD Output

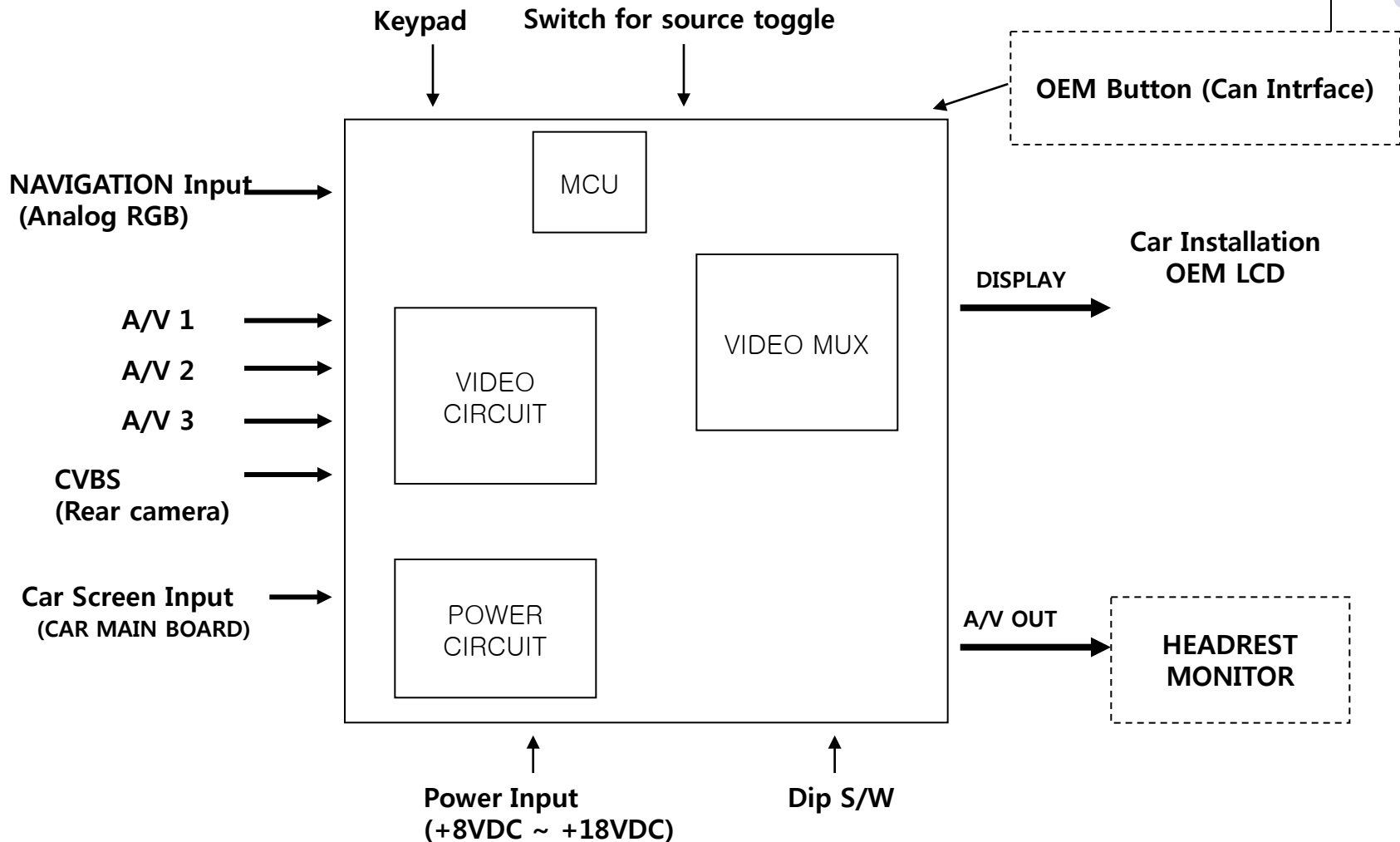
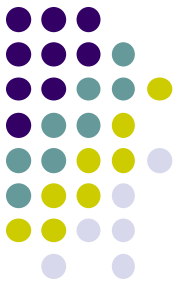
3. Power Spec.

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

4. Switch Input mode

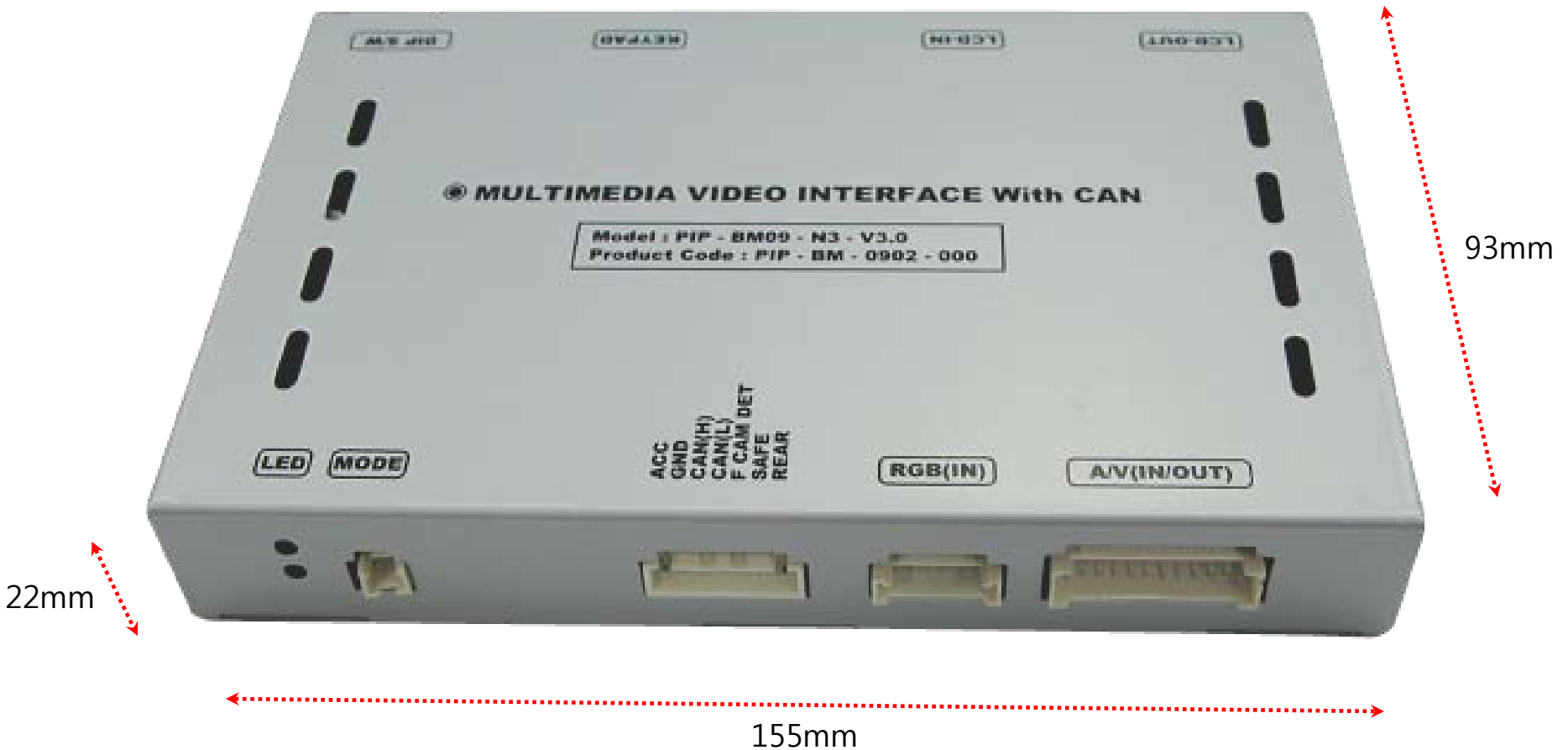
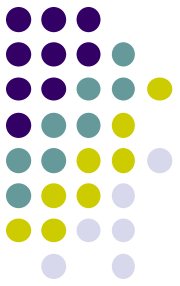
- Input Video MUTE Function : Possible to make each input mute by operating Dip S/W.
- Possible to switch Input mode with Keypad(or Remote control)
- Possible to switch AV3(Front camera) with switch for source toggle
- Detecting rear camera by CAN or rear-lamp wire

-System Composition Diagram

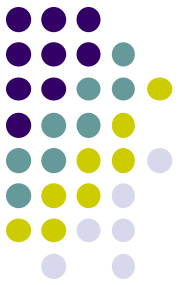


-Dimension

155mm * 93mm * 22mm



-External Appearance



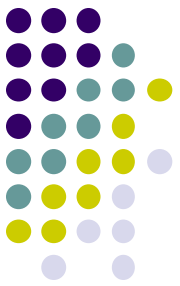
LED MODE

POWER/CAN

RGB(IN)

A/V(IN/OUT)

-External Appearance



↑
MODE

↑
POWER/CAN

↑
RGB(IN)

↑
A/V(IN/OUT)



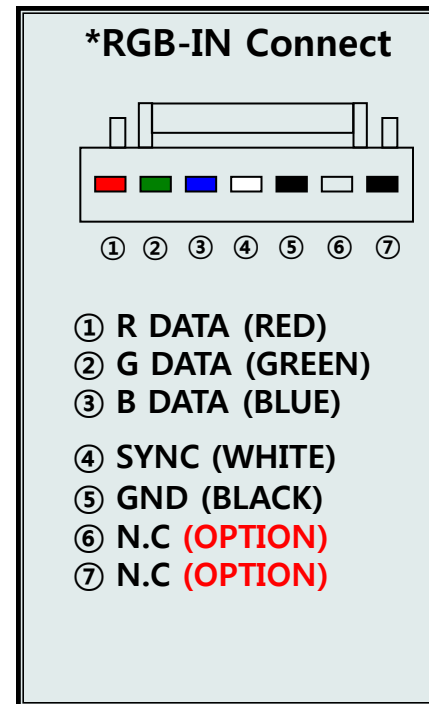
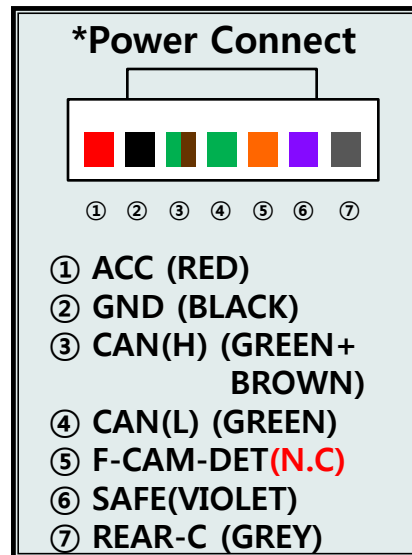
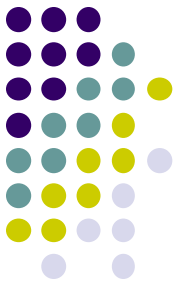
↑
LCD-OUT

↑
LCD-IN

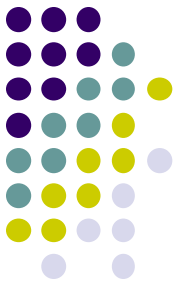
↑
KEYPAD

↑
DIP S/W

-Connector Pin Assignment

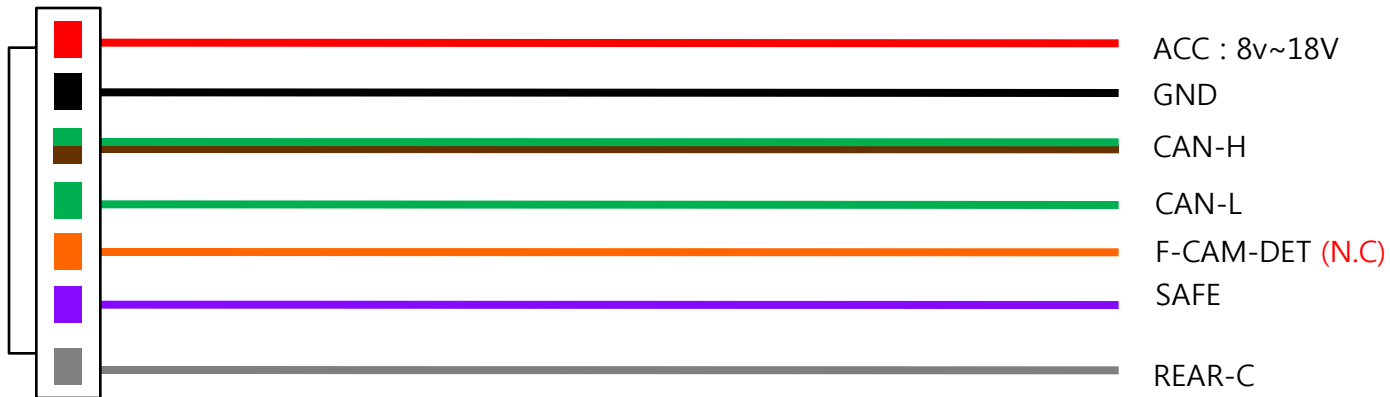
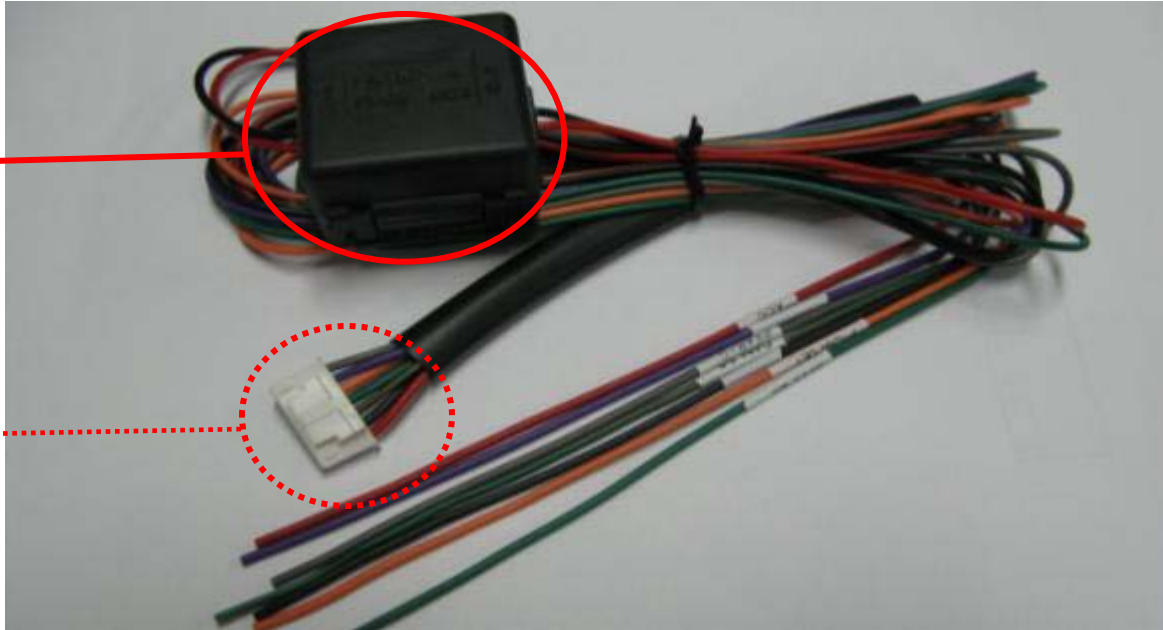


-Connector Pin Assignment



* Power Cable

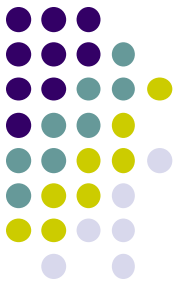
FILTER
& FUSE BOX



← 1m →

*SAFE : When connecting to GND, switched to MAIN image and initialized.

-DIP SW Setting



※ ON : DOWN, OFF : UP ; Default : all OFF

#PIN	FUNCTION	DIP S/W Selection
1	RGB INPUT MUTE	ON : Skipping RGB Mode OFF : RGB Display
2	A/V 1 MUTE	ON : Skipping A/V 1 OFF : A/V1 Display
3	A/V 2 MUTE	ON : Skipping A/V 2 OFF : A/V2 Display
4	A/V 3 MUTE	ON : Skipping A/V 3 OFF : A/V3 Display
5	Monitor Size (E90, F01, F10)	ON : 7" OFF : 8.8", 10.2"
6	N.C	
7	When to choose rear mode (ON : CVBS4, OFF : MAIN)	
8	N.C	

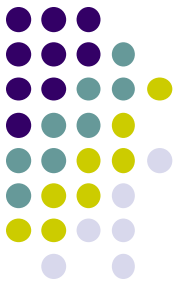
※DIP S/W Use Example

- . Use Input Mode : A/V2, A/V3
- . Use original Navigation
- . Use rear camera

- ▷ DIP S/W : 1,2 -> ON (INPUT MODE SKIP)
- ▷ DIP S/W : 3 -> OFF (enable A/V3)
- ▷ DIP S/W : 4 -> OFF (enable A/V3)
- ▷ DIP S/W : 5,6 -> OFF
- ▷ DIP S/W : 7 -> ON
- ▷ DIP S/W : 8 -> OFF



-How to use remote



Dimension : 92 * 40 * 10 (mm) – Remote or Keypad (**Optional**)



POWER&PIP : N.C

MENU : OSD MENU

OK : Selection

▲ : Up , pressing for 5sec : SAFE MODE Operation.

▼ : Down

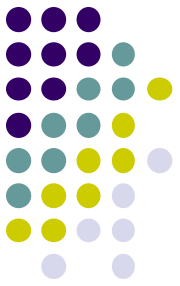
◀ : Left

▶ : Right

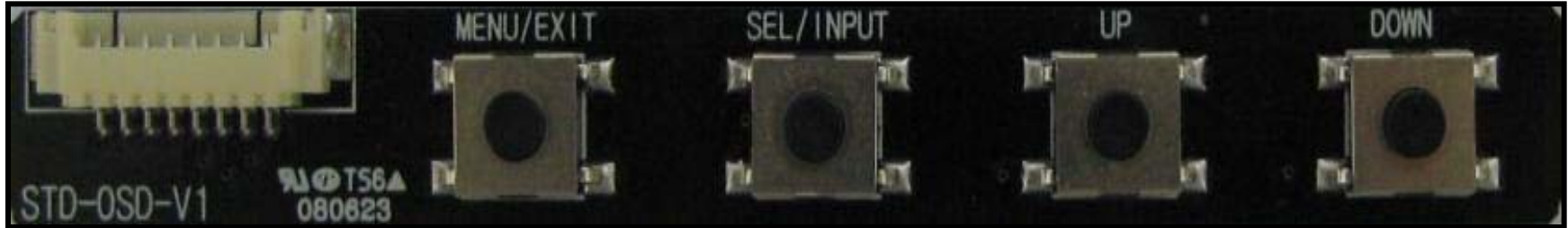
*FACTORY MODE (Interface setting for **installer**)

: Operated by pressing ▲ → ▼ → ▲ →MENU of remote or keypad in order.

-How to use Keypad



※ Remote or Keypad (**Optional**)



MENU : OSD Menu, switching to previous mode.

SEL : Selection in menu, switching AV sources.

UP : Move to Left, Up

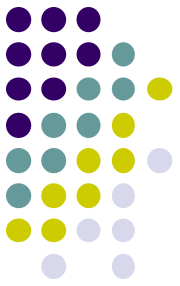
DOWN : Move to Right, Down

UP + DOWN at once : Operating "SAFE MODE"

*FACTORY MODE (Interface setting for **installer**)

: Operated by pressing ▲ → ▼ → ▲ →MENU of remote or keypad in order.

-OEM Buttons



- I-Drive Button (E90, F01, F10)



MENU Button : Long press – Mode Switching
Short press – Switching to OEM

▽ Button : Long Press – Dual Screen operation

※ In **DMB Mode (Only available for Korea Spec.)**

▲ Button : Short press – Channel up
Long press – Channel scan

▽ Button : Short Press – Channel Down
Long press – Dual Screen operation

※ In **reverse gear position (Only available in using aftermarket rear cam)**

▽ Button : Long Press – Dual Screen operation (PDC image : Rear cam)
Short – PDC image transparency adjustment

- Steering Wheel Buttons (E90)

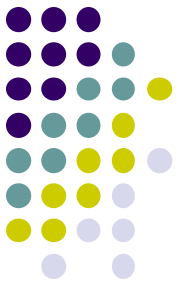


button : Long press – Dual screen operation

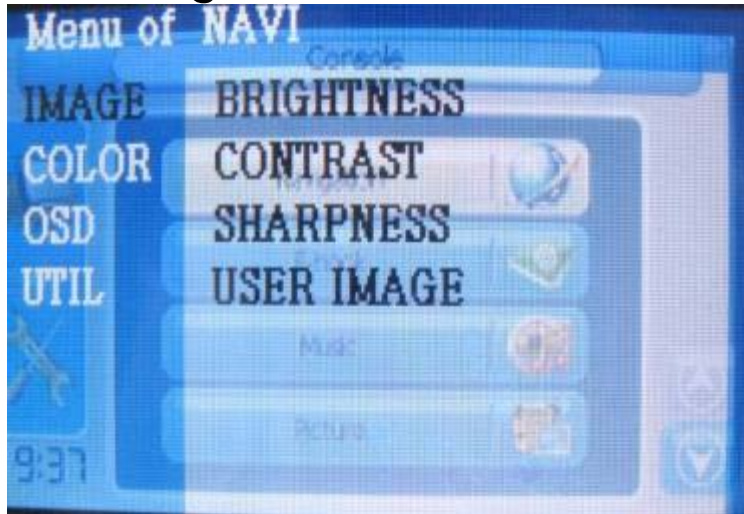


button : Long press - Mode Switching

-OSD(On Screen Display)



- Analog RGB Mode



- Video Mode

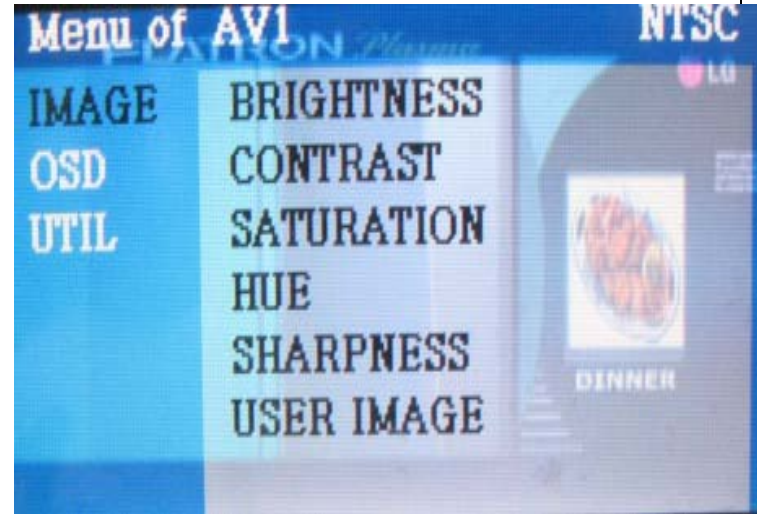
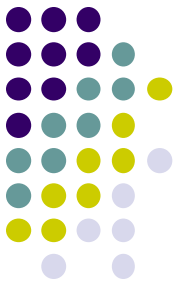


IMAGE Menu

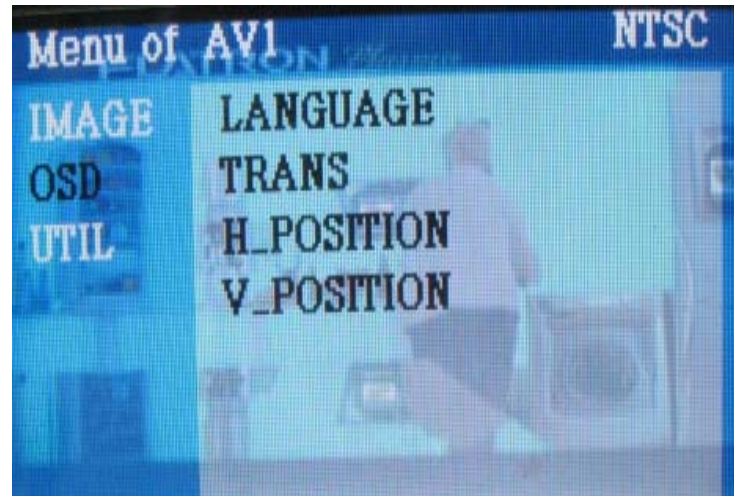
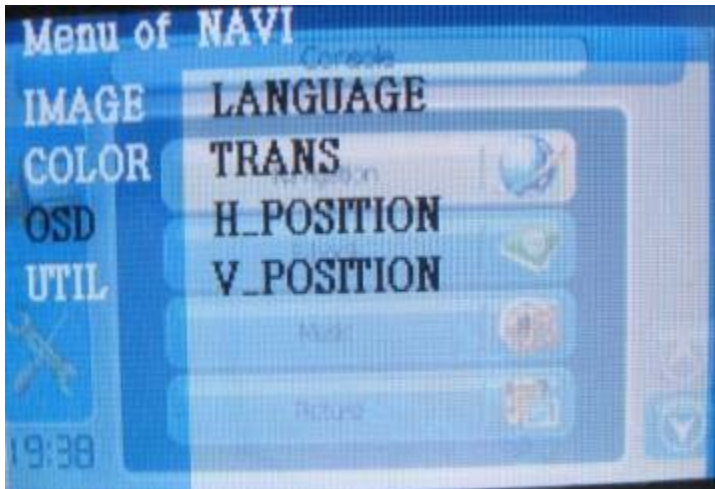
- BRIGHTNESS
- CONTRAST
- SATURATION
- HUE
- SHARPNESS
- USER IMAGE

OSD(On Screen Display)



• Analog RGB Mode

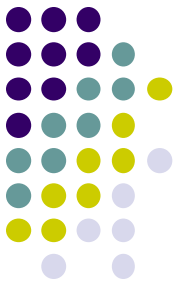
• Video Mode



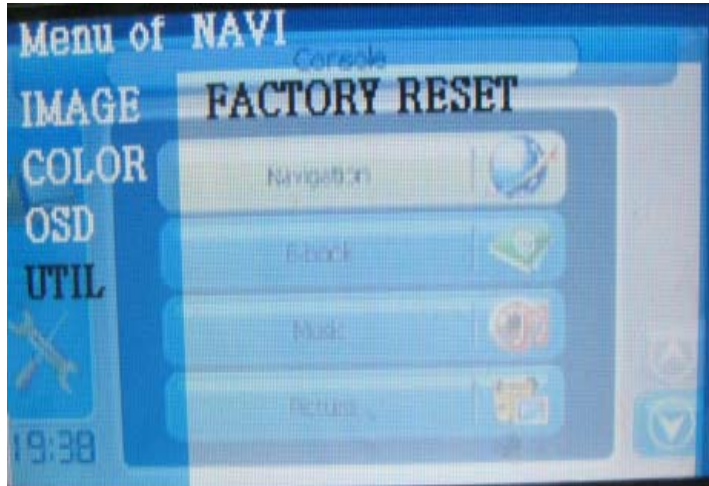
OSD Menu

- **LANGUAGE** : ENGLISH, CHINESE
- **TRANS**
- **H_POSITION**
- **V_POSITION**

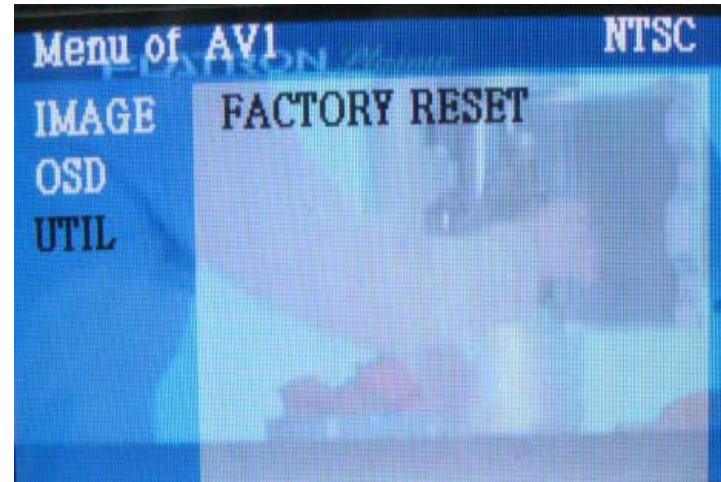
OSD(On Screen Display)



- Analog RGB Mode



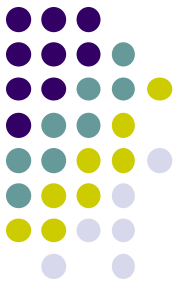
- Video Mode



UTIL Menu

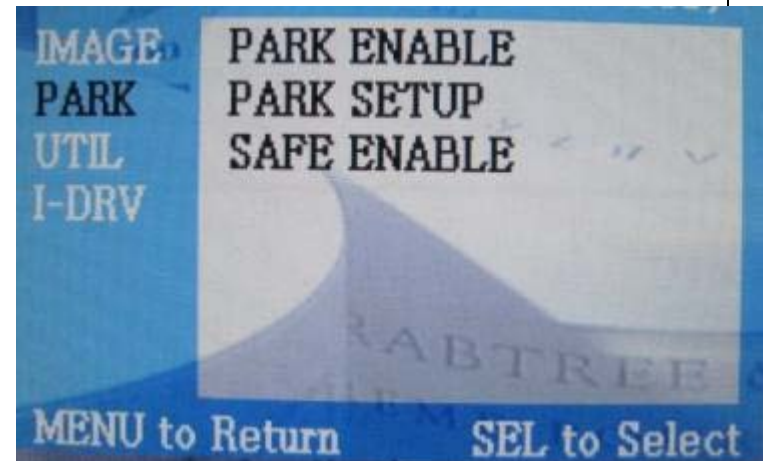
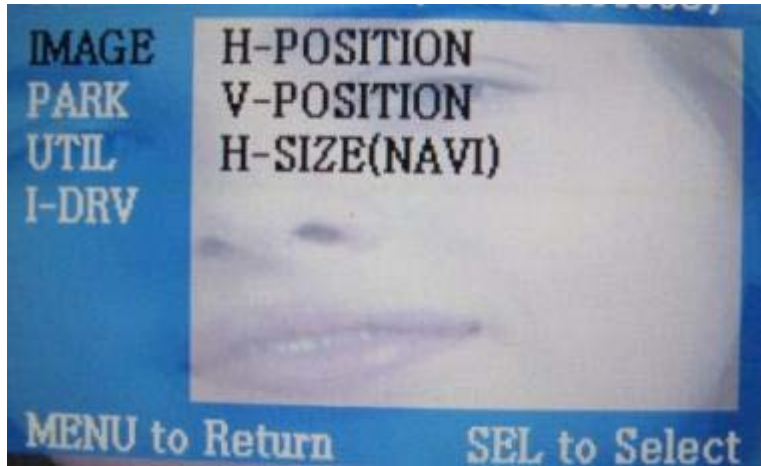
- **FACTORY RESET** : Initializing setting value (NAVI, AV individual initialization)

OSD(On Screen Display)



• Factory Mode

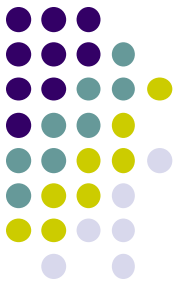
–Operated by pressing ▲ → ▼ → ▲ →MENU of remote or keypad in order.



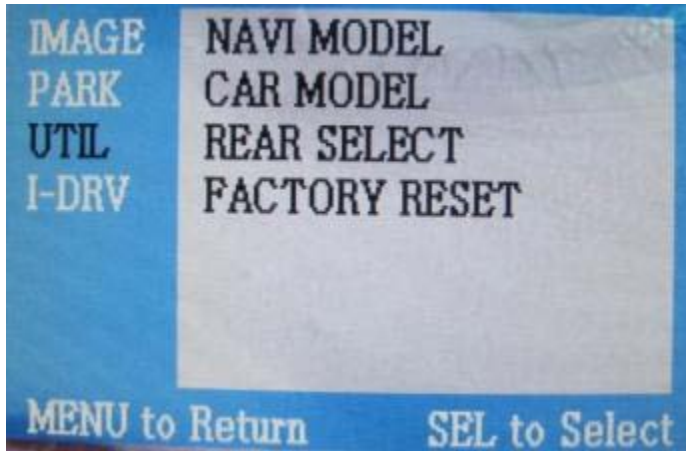
* Factory Mode

- **IMAGE**
 - H-POSITION** : Move to left and right
 - V-POSITION** : Move to up and down
 - H-SIZE(NAVI)**: Navigation horizontality adjustment
- **PARK**
 - PARK ENABLE** : Setting of using parking guide line. (Refer to the next page)
 - PARK SETUP** : **H-POSITION** : Move to left and right of the lines
V-POSITION : Move to up and down of the lines
 - SAFE ENABLE** : When connecting 'SAFE' wire from power cable to side break.
 - ENABLE** – Only OEM Info Image displaying in Drive gear position.
 - DISABLE** – No AV source locking in Driving

OSD(On Screen Display)



- Factory Mode

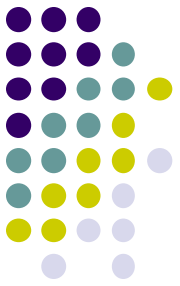


*Factory Mode

- **UTIL** NAVI MODEL : DEFAULT : 480 x 234 (For wide use navigation)
My VI : 800 x 480 (Korea Navigation)
MD7000 : 800 x 480 (Korea Navigation)
KD-900 : 800 x 480 (China Navigation)
- CAR MODEL : E90 (2009Y 3, 5 series), F01(2009Y 7 series), F10 (2010Y 5 series and GT)
- REAR SELECT : LAMP : Detecting rear gear by rear lamp signal with wiring.
CAN : Detecting rear gear by CAN signal

- FACTORY RESET

OSD(On Screen Display)



- Factory Mode



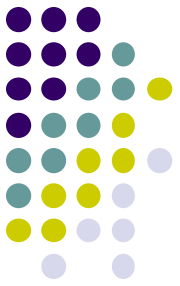
* Factory Mode

I-DRV I-DRIVE TYPE : I-DRV type select (Old or New I-DRV)

DMB TYPE : N.C

I_DRV CONTROL : DVD, CMMB 제어 OSD메뉴 ON/OFF 설정 (중국향)

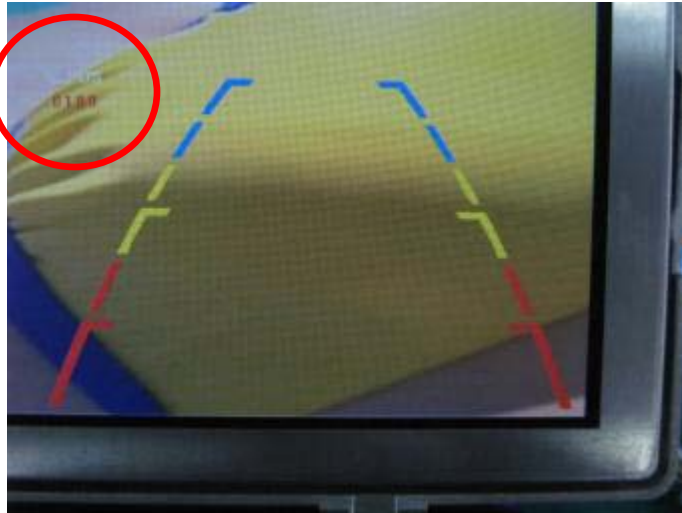
-Factory Mode : Parking line Setting



Factory Default : PARK ENABLE – OFF

- (1) Set "PARK ENABLE" to "ON" to display the lines in the factory menu. (Default – OFF)
 - TYPE : Guide line select (only one type is available in current version)
- (2) After setting and put the gear to rear position, the parking line appears. If needed, press "OK" button of remote to move the line position horizontally on the screen.
- (3) After adjusting H-POS, you can press "OK" button again to get vertical move of the lines.

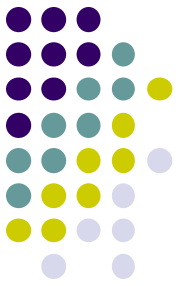
[Vertical Move]



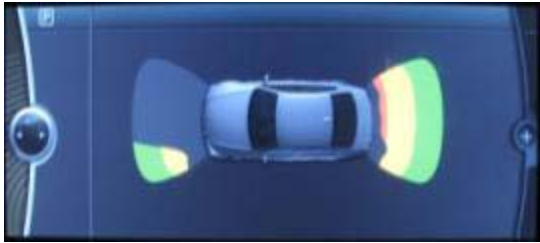
[Horizontal Move]



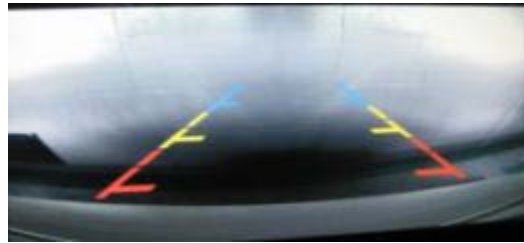
How to use Parking guide line (E90)



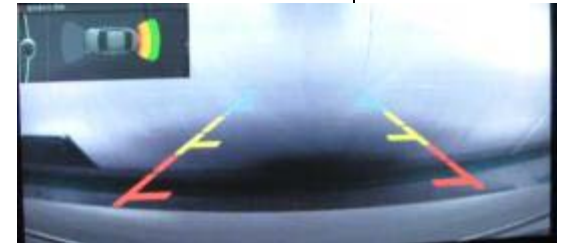
-Rear mode display setting : Set display type with  button on steering wheel. It has 5 types as below.



<PDC Full Screen>



<Rear Cam Full Screen>



<Rear Cam + Mini PDC Screen>



<PDC : Rear Cam>

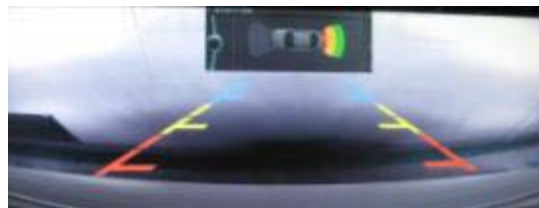


<Rear Cam : PDC>

-Mini PDC Image positioning : Set mini PDC image position with  button. It has 3 types as below



<Type 1>

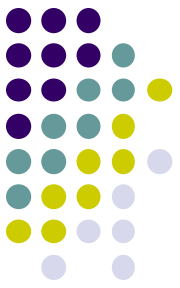


<Type 2>



<Type 3>

How to use Parking guide line (F01, F10)

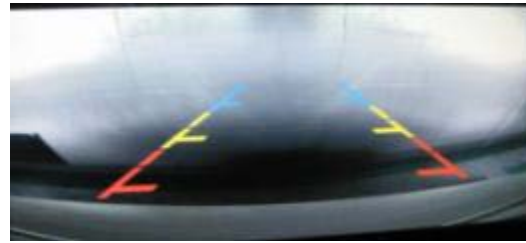


※ This function is only available in car with aftermarket rear cam

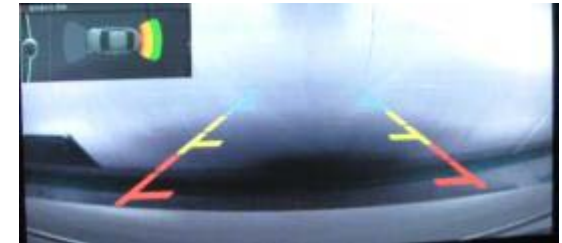
-Rear mode display setting : Push  button on I-DRV to set the type of rear mode display. It has 5 types as below.



<PDC Full Screen>



<Rear Cam Full Screen>



<Rear Cam + Mini PDC Screen>



<PDC : Rear Cam>

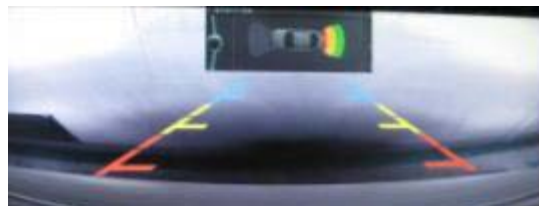


<Rear Cam : PDC>

-Mini PDC Image positioning : Push  button on I-DRV to move Mini PDC image on the screen. It has 3 types as below



<Type 1>

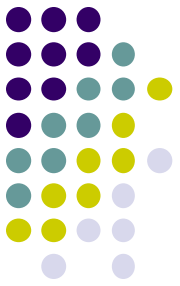


<Type 2>



<Type 3>

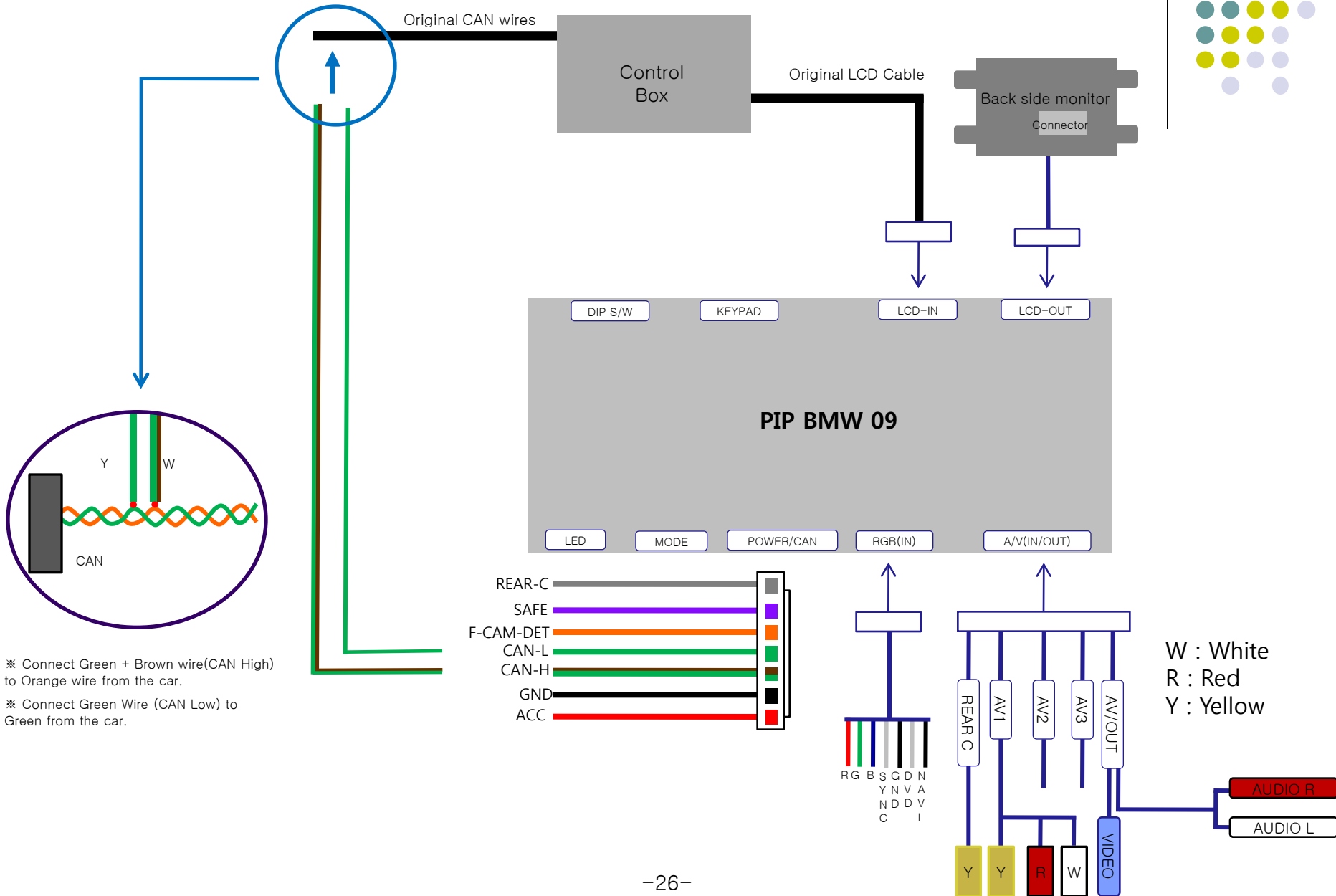
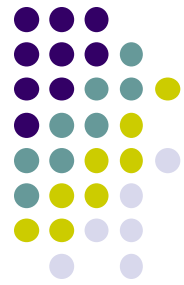
-Product Composition



OSD Keypad or Remote : 1 EA (Optional)
LCD Cable : 1 EA
Navi Cable : 1 EA
Toggle Switch : 1 EA (Optional)

Power Cable : 1 EA
A/V Cable : 1 EA
Ground or IR Cable : 1 EA

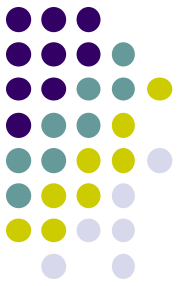
-Installation Diagram



* Connect Green + Brown wire(CAN High) to Orange wire from the car.

* Connect Green Wire (CAN Low) to Green from the car.

-Installation Manual



1. Monitor separation

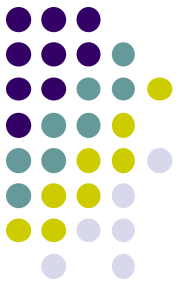


- Remove indicated screws with a proper tool to take apart monitor from the vehicle.

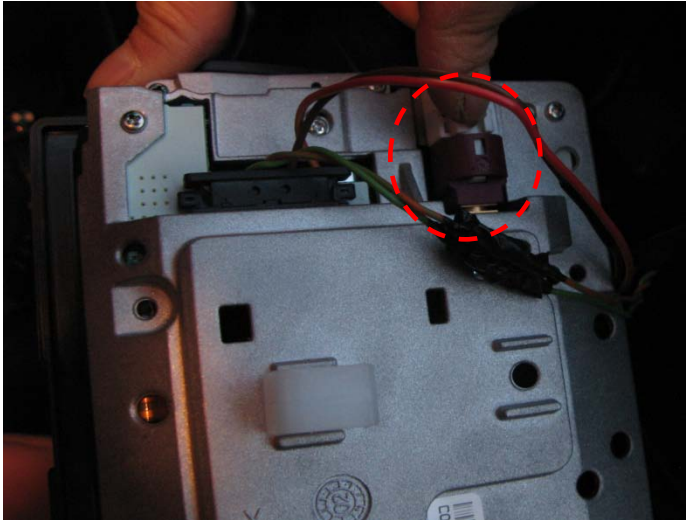


- Pull the monitor out from up to down and take apart it.

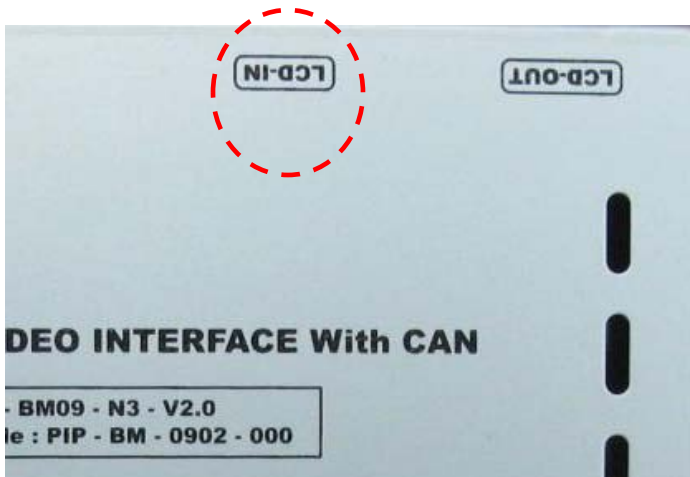
-Installation Manual



2. Connecting Monitor with Interface

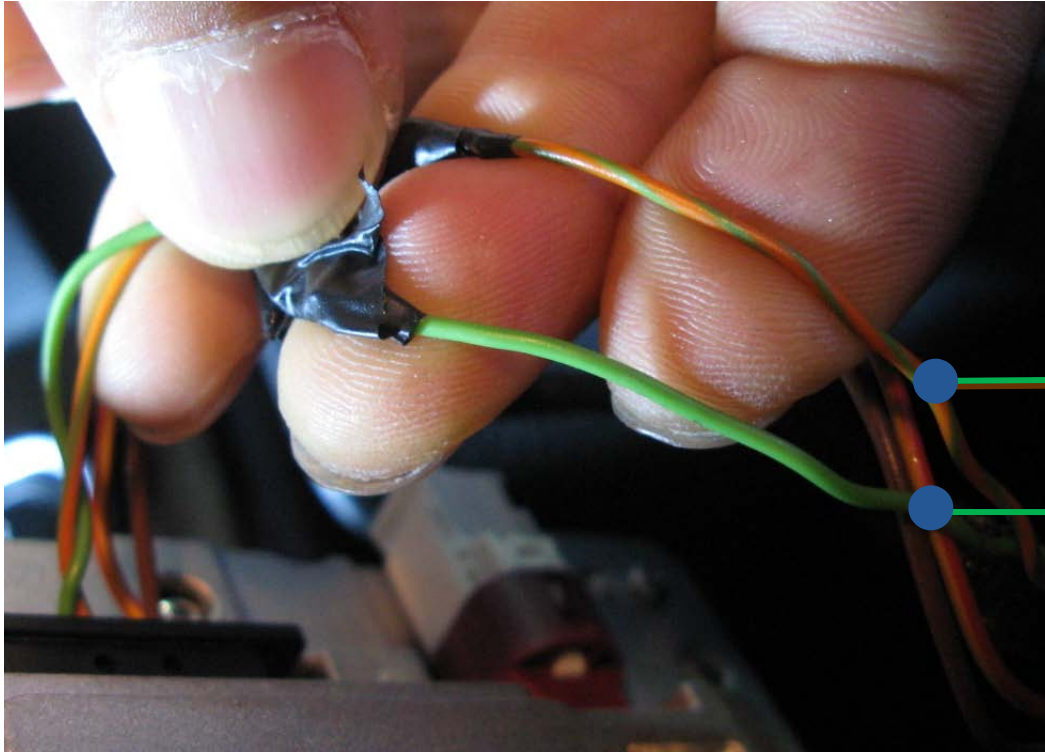
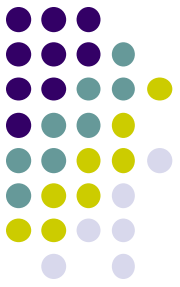


- As left picture, after unplugging the original LCD cable, plug the supplied LCD cable to the indicated connector in the monitor.



-Connect the unplugged original LCD cable to the interface.
Make sure all connections are made correctly the right way as described.

-Installation Manual



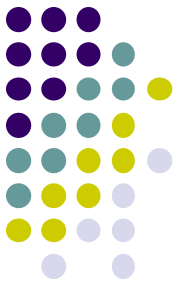
CAN-High

CAN-Low

PIP BMW 09

As the above picture, the offered CAN High wire (Green+Brown) to OEM CAN high (Green+Orange) wire from car, the offered CAN Low wire (Green) to OEM CAN Low (Green)

-Installation Q & A



①



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.**

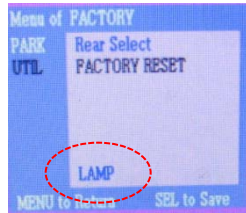
②



Q. Screen only displays white like left picture.

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

③



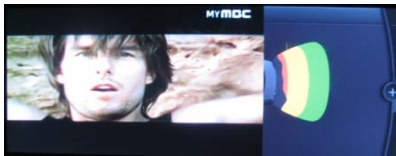
Q. Rear CAM does not appear, when car is in reverse after CAN wiring.

**A. Operate "FACTORY MODE" like left picture, then select "UTIL → Rear Select"
If it is set as "LAMP", change it to "CAN" by remote or keypad.**

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

CAN : In case of detecting Rear Cam thru CAN signal. (CAN must be wired)

④



Q. After moving gear to "P" or "D" from "Reverse", I can't get navigation, but half PDC Image in the screen.

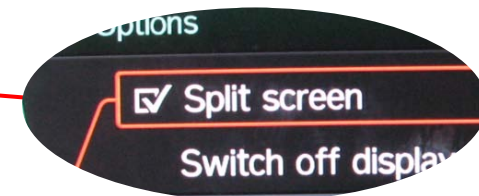
- Once, you starts driving, the screen displays navigation right away, this is not an system error.

⑤

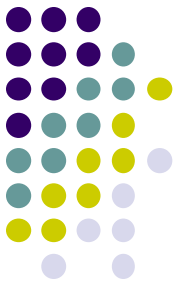


Q. After setting PIP function, I got only half OEM image at the right in the screen.

- This is not an error, just caused by user's setting mistake, user should set to "Split Screen" in the OEM menu.



-Installation Q & A



- ⑥ Q. I can not switch A/V sources
A. Check IR or Ground cable connection.
Check LED lamps in the interface, if it is not on, check power cable.
- ⑦ Q. Displayed image color is not proper (too dim or not suitable color)
A. Try to select "INITIAL" in OSD menu, if it does not work, inform to manufacturer.)
- ⑧ Q. Unwanted A/V mode is displayed. (A/V source switching order : OEM->RGB->AV1->AV2->AV3)
A. Check DIP Switch Setting.
- ⑨ Q. OEM image is not displayed.
A. Check interface's LCD In/Out cable connection. If the status keeps on, inform to manufacturer.