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# PIP-BMW V4 Specification

For 3/5/6 series, X5, X6

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## 1.1 Main specification

- 1. Input Spec. (MULTI VIDEO INTERFACE)
  - -. 1 x Analog R,G,B (Sync on Green)
  - -. 1 x CVBS(REAR CAMERA) Input.
  - 3 x A/V (NTST & PAL) Input.
  - -. 1 x LCD Input (Car system Input)
- 2. Output Spec.
  - -. 2 X CVBS OUTPUT
  - -. 1 x Audio OUTPUT
  - -. 1 X LCD OUTPUT(LCD Operation)
  - -. 4 X Audio Select Output
- 3. Power Spec.
  - Input Power : 8VDC ~ 18VDC
  - Consumption Power : 12WATT, Max
- 4. Mode change
  - Input Video skip : able to skip each input source via adjusting DIP switch
  - Control by using the remote control
  - Able to change a mode by using toggle switch
  - Able to change a mode by, button on the steering wheel in the car via CAN

## 1.2 Features

- PIP (picture in picture) Function (Only available in 8.8" model)
- Controlling PIP function by " $\star$ " button on the steering wheel (The products which are shipped to Japan are different)
- switching AV source by " $\sqrt{-}$ " on the steering wheel (The products which are to Japan are different)
- Easier operation with remote control.
- Displaying External AV sources through composite, RGB
- Controlling AV sources (DVD, Navi) by I-DRV Optional



[PDP - Rear Camera]



[PIP – A/V mode]

## 1.3 System diagram



### 1.4 Components



## 1.5 Exterior



## 2.1.1 DIP switch

| #PIN | Function                                | DIP S/W selection  |
|------|---|--|
| 1    | RGB INPUT skip                          | ON : Skipping RGB Mode<br>OFF : RGB Display  |
| 2    | A/V 1 skip                              | ON : Skipping A/V 1<br>OFF : A/V1 Display  |
| 3    | A/V 2 skip                              | ON : Skipping A/V 2<br>OFF : A/V2 Display  |
| 4    | A/V 3 skip                              | ON : Skipping A/V 3<br>OFF : A/V3 Display  |
| 5    | Monitor Size                            | ON : 6.5" LCD Setting (Possible to use BMW 1 series)<br>OFF : 8.8" LCD Setting   |
| 6    | Type of monitor<br>(Refer to next page) | ON : Siemens setting (only when to turn on the 5 <sup>th</sup> pin)<br>OFF : Alpine setting (only when to turn on the 5 <sup>th</sup> pin)<br>ON : 3 series 2009 year(only when to turn off the 5 <sup>th</sup> pin)<br>OFF : 8.8″ Setting |
| 7    | Rear Mode                               | ON : External Rear Camera<br>OFF : OEM Rear Camera   |
| 8    |   | N.C  |

\* 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.

## 2.1.2 DIP switch

| #PIN<br>Monitor  | 5   | 6   |
|------------------|-----|-----|
| E60 8.8″         | OFF | OFF |
| E60 Alpine 6.5″  | ON  | OFF |
| E60 Siemens 6.5" | ON  | ON  |







[E60 Alpine 6.5"]

### %DIP S/W Use Example

### [BMW E60-6.5" Alpine]

- -. Use Input Mode : A/V3(DVD), Navigation (RGB)
- -. Rear Camera : When to be installed on CVBS 4
- $\triangleright$  DIP S/W : 1  $\rightarrow$  OFF
- ▷ DIP S/W : 2,3  $\rightarrow$  ON (INPUT MODE SKIP)
- ▷ DIP S/W : 4  $\rightarrow$  OFF (enable A/V3)
- ▷ DIP S/W : 5  $\rightarrow$  ON (6.5" Alpine)
- $\triangleright$  DIP S/W : 6  $\rightarrow$  OFF
- ▷ DIP S/W : 7  $\rightarrow$  ON (enable CVBS4)
- $\triangleright$  DIP S/W : 8  $\rightarrow$  OFF



[E60 Siemens 6.5"]



[2009 Year 3 series]

### 2.2 Remote control

| Кеу     | Function   |
|---------|--|
| POWER   | Not for use  |
| PIP     | Activating PIP (Picture in Picture)  |
| MENU    | OSD implementation   |
| ОК      | Making a selection   |
| <b></b> | Move upward  |
| •       | Move downward  |
| •       | Move leftward, press 2 seconds long-Factory mode implementation                        |
| ►       | Move rightward, press 2 seconds long-Factory<br>Mode implementation-Factory mode Reset |



## 2.3 Keypad



| Function                                 |
|--|
| OSD Menu, switching to previous mode.    |
| Selection in menu, switching AV sources. |
| Move leftward, upward                    |
| Move rightward, downward                 |
| SAFE MODE implementation                 |
|  |

\*FACTORY MODE (Interface setting) : Operated by pressing  $\blacktriangle \rightarrow \lor \rightarrow \blacklozenge \rightarrow MENU$  of remote or keypad in order.

## 2.4 OSD (on screen display)

OSD menu: Operated by pressing MENU button of remote control.

#### <u>Analog RGB mode</u>

| Menu of  | NAVI                |
|----------|---------------------|
| IMAGE    | BRIGHTNESS          |
| COLOR    | CONTRAST            |
| UTIL     | USER IMAGE          |
|          | GPS监视器              |
|          |                     |
| MISNU to | Keturn OK to Select |

#### <u>Video mode</u>

IMAGE

- HUF

- BRIGHTNESS

- SATURATION

- SHARPNESS

- CONTRAST

| Menu of | AV1        | NTSC         |
|---------|------------|--------------|
| IMAGE   | BRIGHTNES  | S            |
| UTIL    | SATURATIO  | N            |
|         | HUE        |              |
|         | USER IMAGI | E            |
|         |            |              |
| MENU to | Return     | OK to Select |

#### Analog RGB mode



### MENU to Return

OSD -LANGUAGE : To change the language displaying while using Touch OSD

**OK to Select** 

(select 1 among English or Chinese)

- TRANS : Transparency control of the OSD background

- H\_POSITION : Horizontal movement of the OSD window

- V\_POSITION : Vertical movement of the OSD window

#### Analog RGB mode



#### <u>Video mode</u>

| Menu of | AV3           | NTSC   |
|---------|---------------|--------|
| IMAGE   | FACTORY RESET |        |
| OSD     |               |        |
| UTIL    |               |        |
|         |               |        |
|         |               |        |
|         |               |        |
|         |               |        |
| MENU to | Return OK to  | > Save |

### UTIL

- FACTORY RESET : To reset all the values about navigation, DVD screen to factory default.

(NOT available for reset of the position value of images, only for functions inside OSD menu)

- USER IMAGE : To choose a option

among 4 prepared color shade.

## 2.5.1 Factory mode

\*FACTORY MODE : Operated by pressing  $\blacktriangle \rightarrow \lor \rightarrow \blacklozenge \rightarrow MENU$  of remote control or keypad in order.

#### Setup for navigation Setup for car model Menu of FACTORY Menu of **FACTORY** NAVI MODEL IMAGE NAVI MODEL MAGE **H-POSITION** CAR MODEL **V-POSITION** PARK PARK PARK REAR SELECT REAR SELECT UTIL H-SIZE(NAVI) I-DRV AVOUT SELECT I-DRV AVOUT SELECT I-DRV FACTORY RESET FACTORY RESET E60\_NEW MENU to Return SEL to Save **MENU** to Return MENU to Return SEL to Select SEL to Select UTIL – NAVI MODEL IMAGE UTIL - CAR MODEL Definition of the navigation Adjusting the position and the size Selecting model of the car of navigation DEFAULT: 400X234, low definition F60: When to install BMW 5 series H-POSITION : moving in horizontal E60\_NEW : If not work with E60, Use this direction E60 OLD : When there is a offset V-POSITION : moving in vertical problem on E60 direction E70: When to install BMW X5 (E70) H-SIZE : adjusting the horizontal size of the navigation

## 2.5.2 Factory mode

\*FACTORY MODE : Operated by pressing  $\blacktriangle \rightarrow \lor \rightarrow \blacklozenge \rightarrow MENU$  of remote control or keypad in order.



Menu of PACTORY IMAGE PARK UTIL I-DRV MENU to Return MENU to Return MENU to Return MENU to Return



#### UTIL - REAR SELECT

Selecting how to detect the rear view camera

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 via CAN signal (Installer must connect "CAN" cable of the power cable to the "CAN" cable of the car.)

#### UTIL - AVOUT SELECT

Selecting background sound while navigation is displayed on the screen

DEFAULT : default, the sound of previous image before displaying navigation DTV : sound of DTV A/V : sound of A/V source

#### **UTIL - FACTORY RESET**

Resetting factory mode

YES : resetting factory mode NO : undoing reset of the factory mode

## 2.5.3 Factory mode

\*FACTORY MODE : Operated by pressing  $\blacktriangle \rightarrow \lor \rightarrow \blacklozenge \rightarrow MENU$  of remote control or keypad in order.





### **I-DRI TYPE**

-NEW I-DRV – When there is a New I-Drive on the car as shown below



<2009 Model I-DRIVE>

- OLD I-DRV – When there is a Old I-Drive on the car as shown below



<~2008 Model I-DRIVE>

\* 328i, 335i 2009model : OLD I-DRIVE, 5 series : NEW I-DRIVE

## 2.5.4 Factory mode

\*FACTORY MODE : Operated by pressing  $\blacktriangle \rightarrow \lor \rightarrow \blacklozenge \rightarrow MENU$  of remote control or keypad in order.



| I-DRV - REMOTE<br>Selecting model of navigation and<br>DMB respectively to control I_DRV<br>function | I-DRV - CONTROL<br>Selecting whether to use I_DRV<br>function or not | I-DRV - AUX<br>Selecting whether to use I_DRV<br>AUX |
|--|--|--|
| TUTCION  |  |  |
| PIONEER<br>ALPINE<br>YCR-900   | ON/OFF   | ON/OFF   |
|  |  |  |

## 2.6 Rear view parking guide line

#### Factory Default : DISPLAY - DISABLE





#### PARK

PARK ENABLE : Selecting whether to display the parking guide line or not on rear gear (default : ON)

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

- **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 get back to the main (default : OFF)
- 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)
- b. If you set 'PARK ENABLE' as "ON" state, there will be the rear view parking guide line. (as shown right top)

### 2.7 CAN Wiring & Steering wheel button



### 3.1 Pre-installation Notices

- 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.

### 3.2 Installation diagram



## 4. Troubleshooting

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.

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 dim or not suitable color)

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

Q. Rear camera image does NOT appear. A. Set DIP switch #7 in "ON"

Q. Unwanted A/V mode is displayed. (A/V source switching order : OEM->RGB->AV1->AV2->AV3) A. Check DIP Switch Setting.

Q. OEM image is not displayed.

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

Q. Screen only displays white like left picture.

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

