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Model : QVL-BMW-STD-V2 / Product code : BM-0806-101

BMW-STD

Specification & Installation

Compatible with BMW E60/61/90

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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. (Rear camera source)
- 3 x A/V (NTST & PAL) Input.
- 1 x LCD Input (Car system Input)

2. Output Spec.

- 2 X CVBS OUTPUT (Video Out for installing Headrest monitor)
- 1 x Audio OUTPUT
- 1 X LCD OUTPUT(LCD Operation)

3. Electric Power Consumption

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

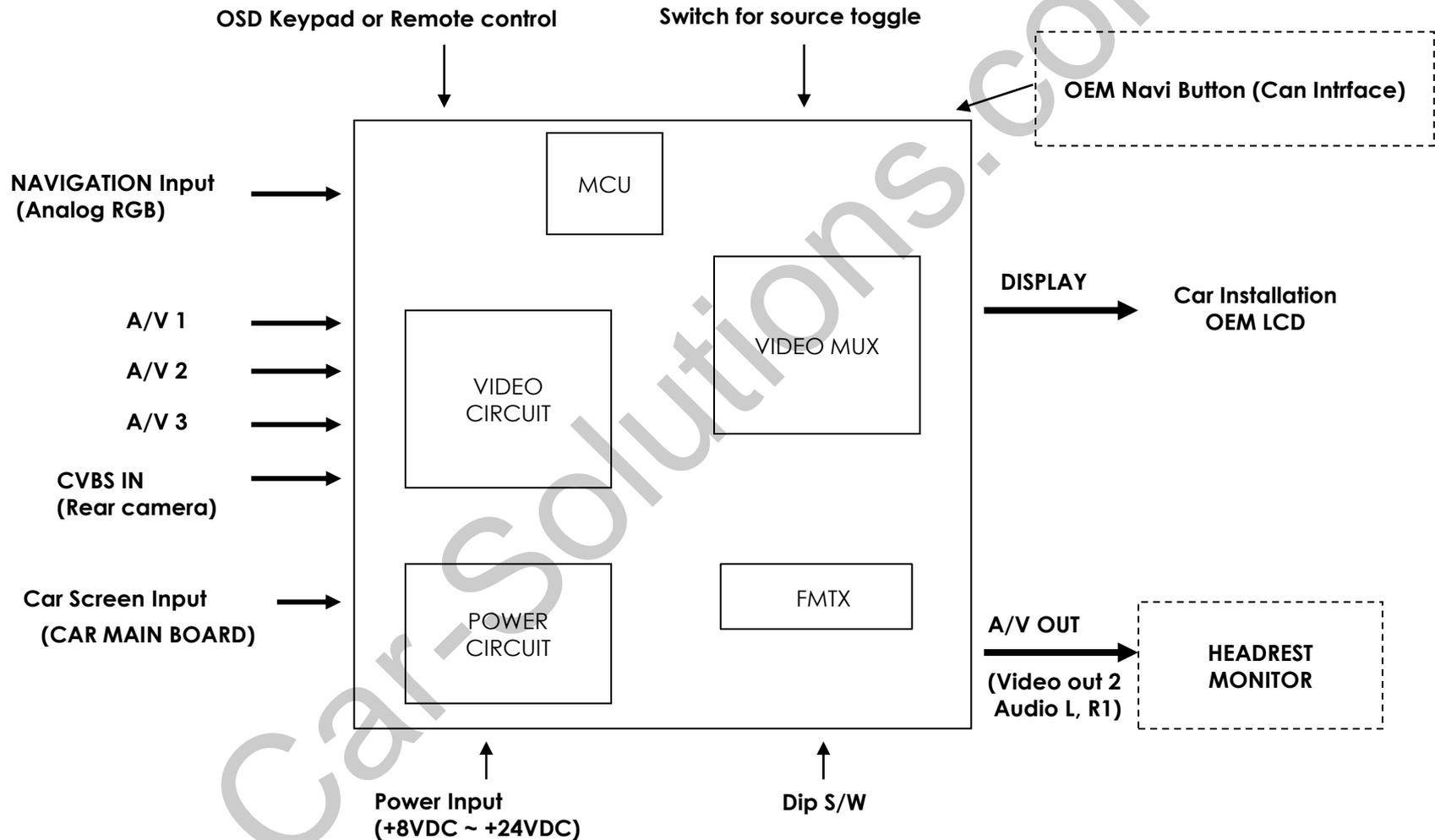
4. Switching Mode (AV source)

- Possible to skip AV source by switching Mode (AV source) in DIP S/W (Refer to the DIP S/W page)
- By 'SET' button of the OSD Keypad and Remote Control
- By Toggle Switch (Option)
- By 'Menu' button of the car through CAN

1.2 Features

- FMTX Module is added in the product.
(No need additional FMTX Module for Audio)
- Provide OSD Key Pad or Remote control
- Possible to move the Navi display position(Only on RGB mode)
- Changed OSD MENU

1.3 System diagram



1.4 Components



IR cable (8P) * 1ea
(HIRCAB0002)

Remote control * 1ea
(REMOTE0001)

OR



Ground cable * 1ea
(HGROUN0001)

Keypad * 1ea
(SMTASY0063)



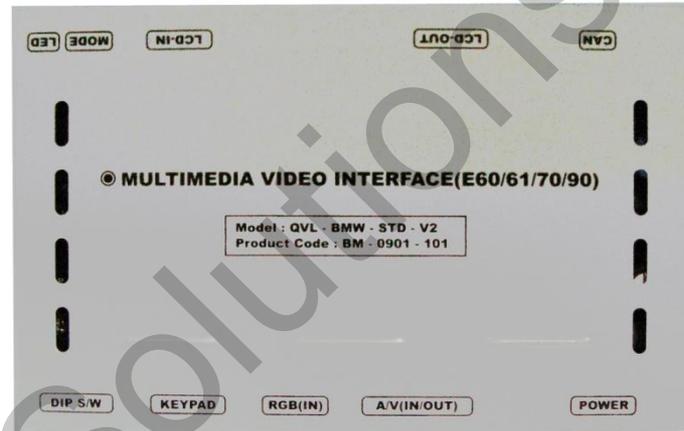
MODE cable * 1ea
(HARETC0001)



LVDS cable(F-TYPE) * 1ea
(HLVDSC0005)



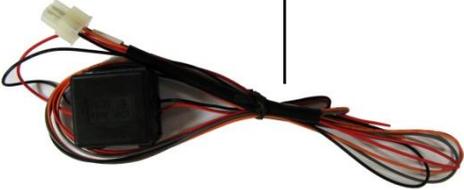
CAN cable * 1ea
(HARETC0012)



RGB cable * 1ea
(HNAVIC0004))



AV cable * 1ea
(HAVCAB0002)



POWER cable (6P) * 1ea
(HPOWER0001)

1.5 Exterior

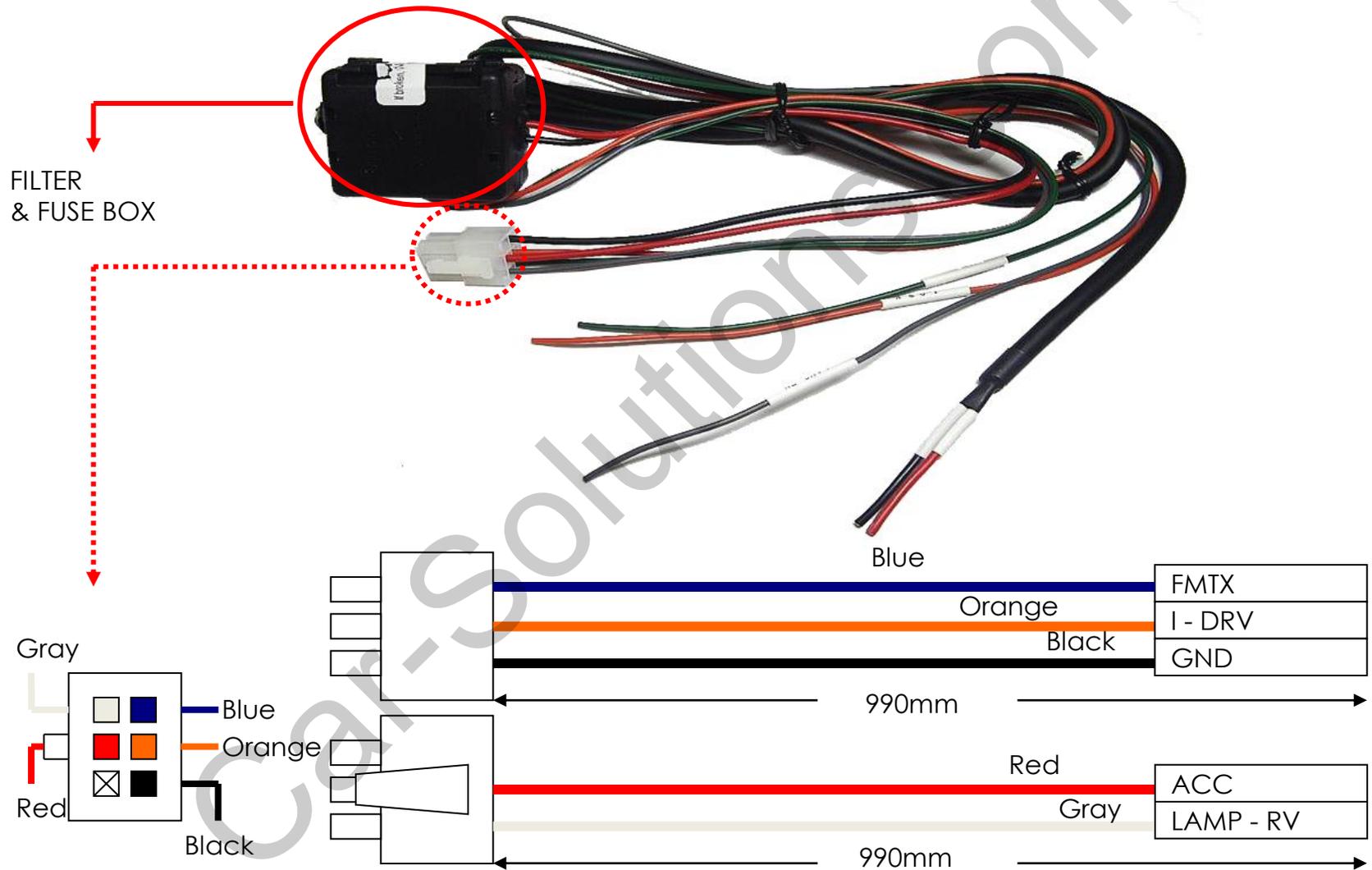


Dimension

Horizontal length 147mm
Vertical length 92mm
Height 20mm

- ① DIP switch
- ② KEYPAD
- ③ RGB(IN)
- ④ A/V(IN/OUT)
- ⑤ POWER
- ⑥ CAN
- ⑦ LCD-OUT
- ⑧ LCD-IN
- ⑨ MODE
- ⑩ LED

1.6 POWER cable



2.1.1 DIP switch

※ ON : DOWN / OFF : UP

PIN	Function	Dip S/W Selection
1	RGB INPUT MUTE	ON : RGB Mode Skip OFF : RGB Display
2	A/V 1 MUTE	ON : A/V 1 Skip OFF : A/V1 Display
3	A/V 2 MUTE	ON : A/V 2 Skip OFF : A/V2 Display
4	A/V 3 MUTE	ON : A/V 3 Skip OFF : A/V3 Display
5	To select monitor size	ON : 6.5" LCD Setting (for BMW 1 series) OFF : 8.8" LCD Setting
6	Type of monitor (Refer to the next page)	ON : Siemens setting (when the 5 th pin is ON) OFF : Alpine setting (when the 5 th pin is ON) ON : Operation rear monitor for New 7 (when the 5 th pin is OFF) OFF : 8.8" Setting
7	Rear Mode	ON : External Rear Camera OFF : OEM Rear Camera
8		N.C

2.1.2 DIP switch

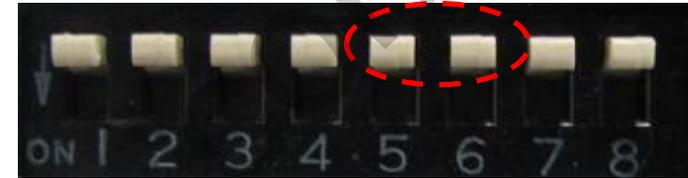
Type of monitor \ #PIN	5	6
E60 8.8"	OFF	OFF
E60 Alpine 6.5"	ON	OFF
E60 Siemens 6.5"	ON	ON
E60 Armrest 6.5"	OFF	ON

※DIP S/W Use Example

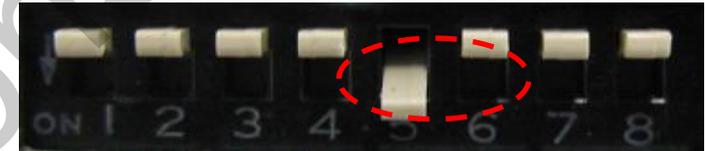
[BMW E60-6.5" Alpine]

- . Use Input Mode : A/V3(DVD), Navigation (RGB)
- . Rear Camera : When to be installed on CVBS 4

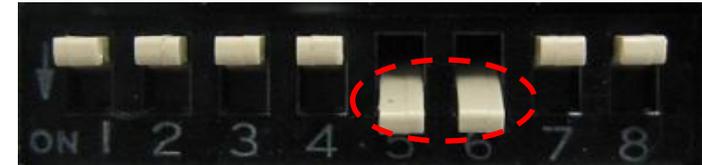
- ▷ DIP S/W : 1 → OFF
- ▷ DIP S/W : 2,3 → ON
(INPUT MODE SKIP)
- ▷ DIP S/W : 4 → OFF (enable A/V3)
- ▷ DIP S/W : 5 → ON (6.5" Alpine)
- ▷ DIP S/W : 6 → OFF
- ▷ DIP S/W : 7 → ON (enable CVBS4)
- ▷ DIP S/W : 8 → OFF



[E60 8.8"]



[E60 Alpine 6.5"]



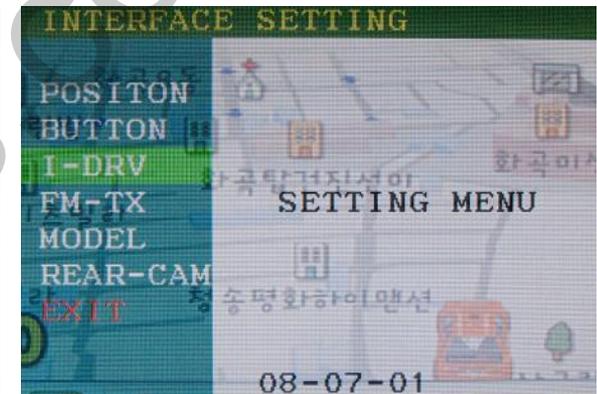
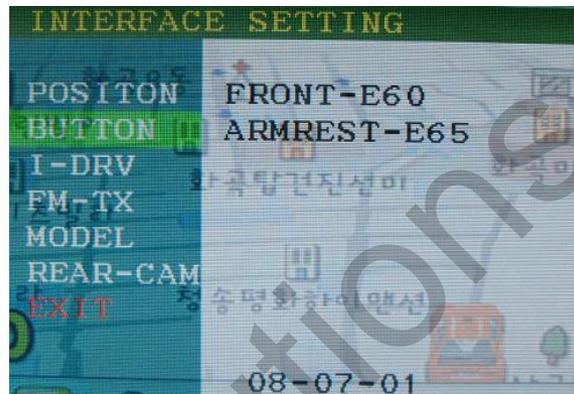
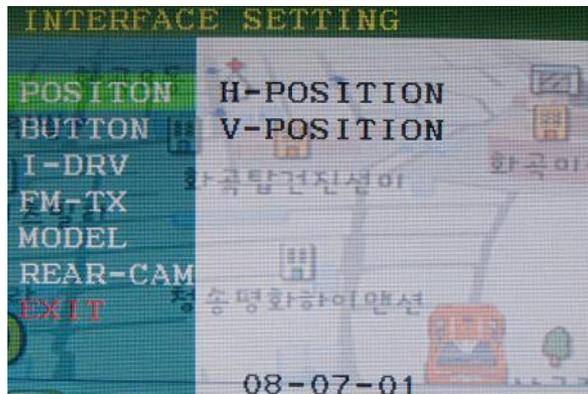
[E60 Siemens 6.5"]



[E65 Armrest 6.5"]

2.2.1 FACTORY mode

FACTORY mode : Operated with pressing UP->DOWN->UP->MENU keys of the keypad in sequent.



POSITION

- H-POSITION : adjust horizontal direction
- V-POSITION : adjust vertical direction

BUTTON

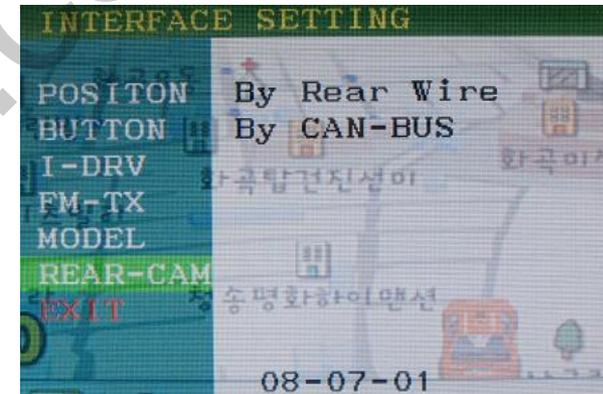
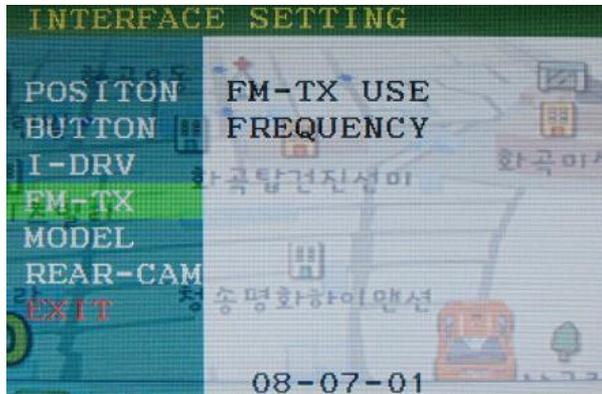
- FRONT – E60 : Set up for mode change via menu buttons in E60 Front Monitor
- ARMREST – E65 : Set up for mode change via menu buttons in E65 Armrest Monitor

I-DRV

- To control DVD, Navi by I-DRV (Optional)
Refer to the "BMW Handle button NAVI setting" page.

2.2.2 FACTORY mode

FACTORY mode : Operated by pressing UP->DOWN->UP->MENU keys of the keypad in sequence.



FM-TX

- FM-TX USE : Set up for FMTX
- FREQUENCY : FMTX Frequency Setting. (Refer to the next 'FMTX frequency setting' page)

MODEL

- For E60 : When to install on E60 (This is initially set)
- For E70 : When to install on E70 (Not available at present)

REAR-CAM

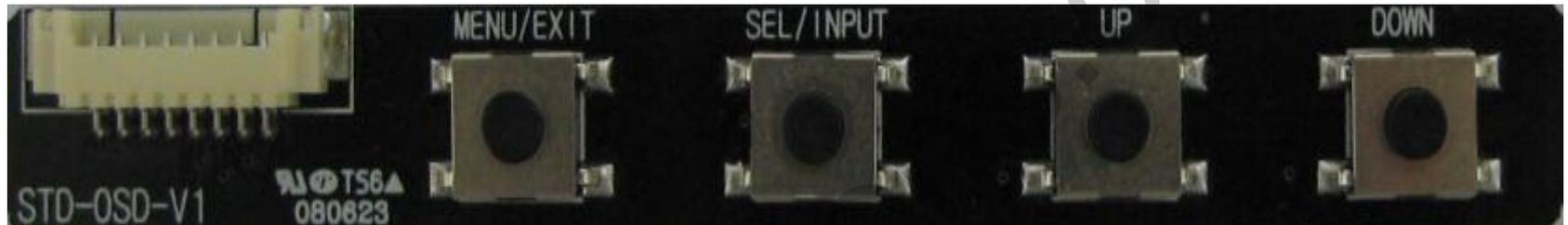
- By Rear Wire : by using provided interface power cable, Rear View camera setup (same with previous version)
- By CAN-BUS : When to install Back-up Cam by CAN wiring. In this case, when the car is in reverse, the CAM is detected automatically.

2.3 Keypad usage

Select one between the remote control and the keypad

FACTORY MODE (Interface setting) :

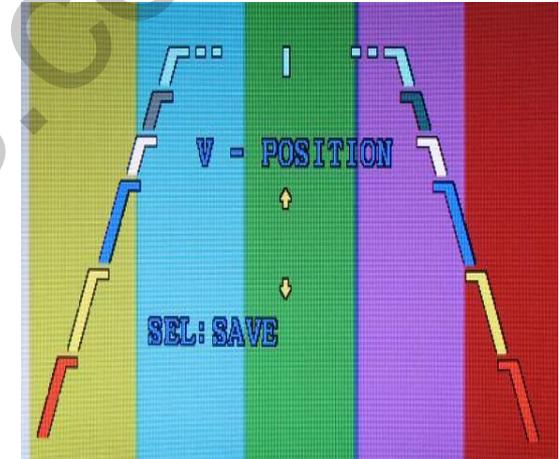
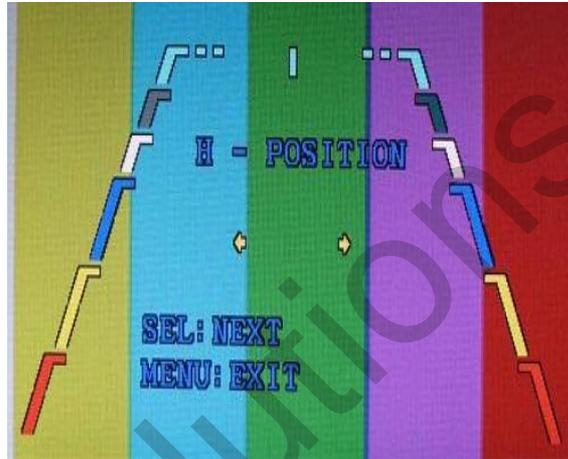
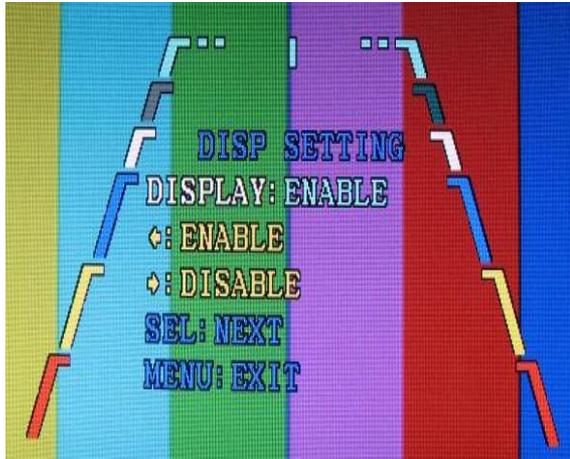
Press these buttons on OSD keypad in the following sequence; **UP→DOWN→UP →MENU**



Key	Function
MENU/EXIT	Activating OSD menu and Go back to the previous state after setting mode
SEL/INPUT	Making a selection and changing modes
UP	Moving leftward or upward
DOWN	Moving rightward or downward (IF you press this button 2 seconds long, you can reset all data.)

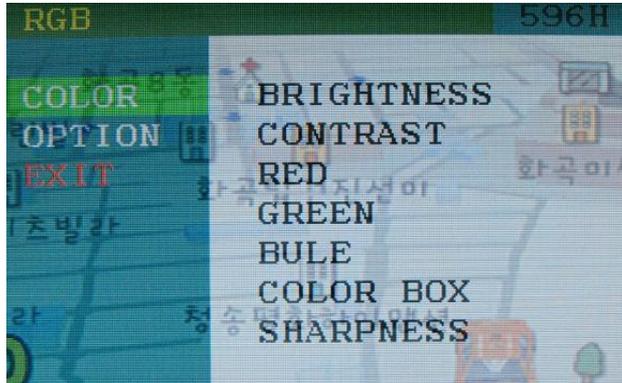
2.4 Parking guide line

Factory Default : DISPLAY - DISABLE

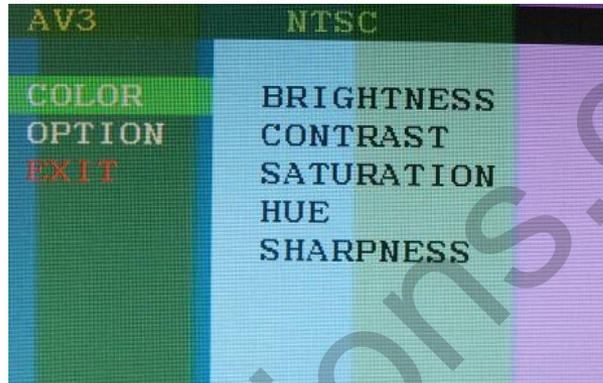


- ① When the car is in reverse, if press 'UP' key for 2 sec, the guide line appears on the screen.
- ② If you need to move the line position, press 'SEL' key on the above step.
(Use 'Up', 'Down' Key of Keypad)
- ③ On step no.2, once press "SEL" key again, you can move the line vertically by "UP", "Down" keys.

2.5 OSD (on screen display)



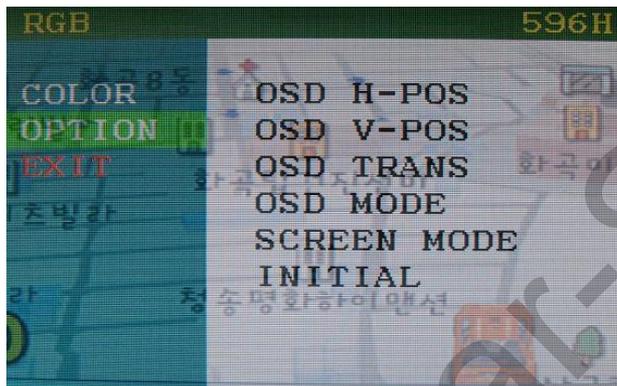
Analog RGB Mode



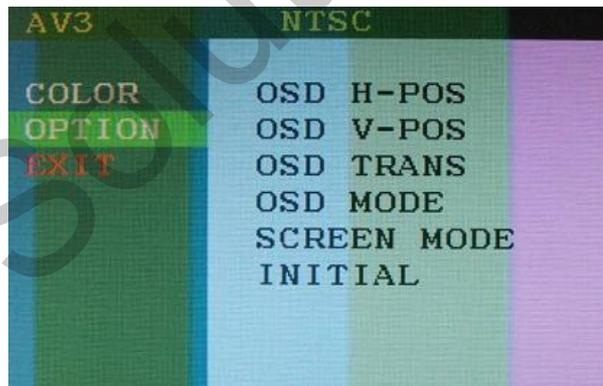
Video mode

COLOR

- BRIGHTNESS
- CONTRAST
- RED
- GREEN
- BLUE
- COLOR BOX : Selecting one among 3 color options
- SATURATION
- SHARPNESS



Analog RGB Mode



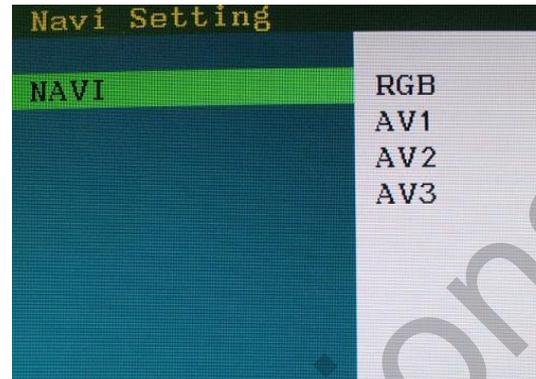
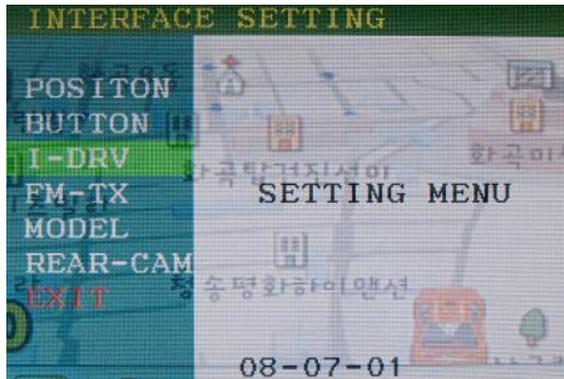
Video mode

OPTION

- OSD H_POS : Move of OSD window to Left, Right
- OSD V_POS : Move of OSD window to Up, Down
- OSD TRANS : OSD window transparency setting
- SCREEN MODE : Screen Rate setting (4:3, 16:9)
- INITIAL : Initializing OSD setting

2.6 BMW Handle Button NAVI setting

Overseas

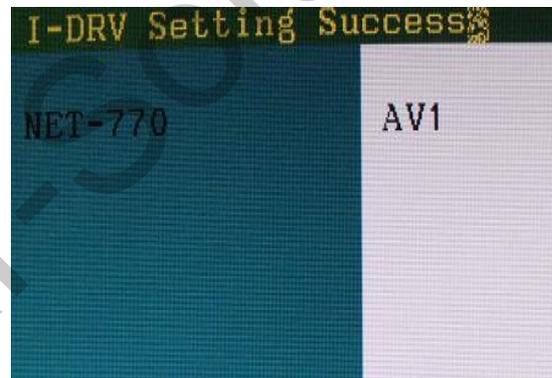
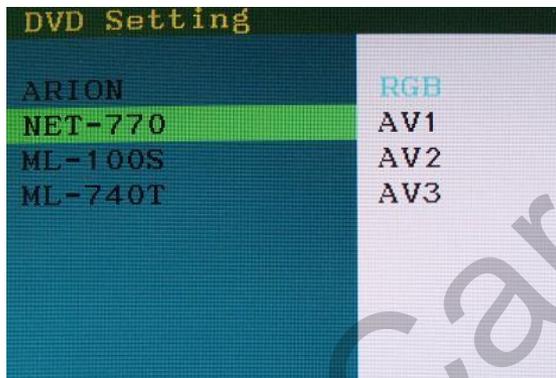


After implementing FACTORY MODE (Interface setting), select I-DRV and press the Sel button of Keypad, and then Navi Setting window will be displayed as shown on the right picture.

After select one between RGB, and AV1~3, press the Sel button of keypad. (It is fine to select any channel, because selecting RGB, AV1~3 is useless. But, the selected channel will be exempted on next channel settings.)

※ This function is not supported at domestic NAVI, but this setting is necessary for implementing Domestic DTV.

Domestic

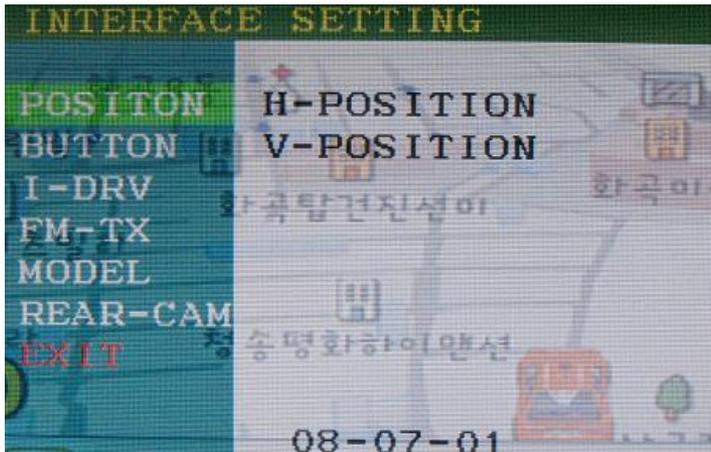


After the above steps finish, left picture will appear. ARION, NET-770, ML-100S, ML-740T are Domestic DTV model. Select the model you want to use, then select channel of RGB, AV1~3. (The channel selected on the above steps is exempted.) NET-770 (DTV model) is designated AV1 as shown right.

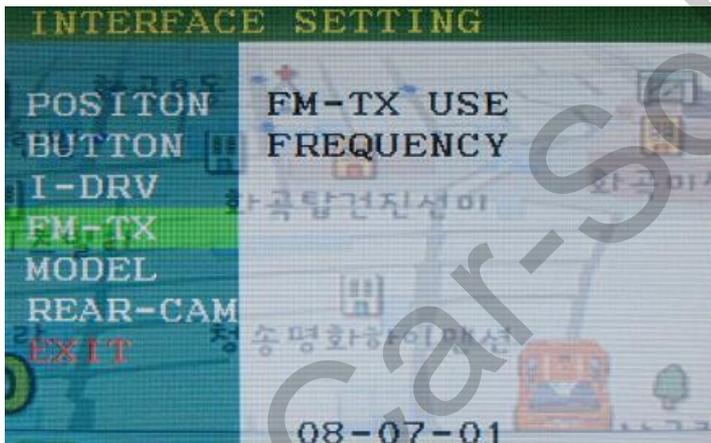
※ When DVD-IR (Black) wire of RGB-IN cable is connected to IR input wire of DTV, able to operate via handle buttons.

2.7 FMTX Frequency Setting

Factory Default : FMTX USE – ON, FREQUENCY – 87.5MHz



Get the Factory Mode Operated by pressing UP->DOWN->UP->MENU keys of the keypad in sequence.



Set "FM-TX USE" to "ON" as shown left. ('ON' is Default).

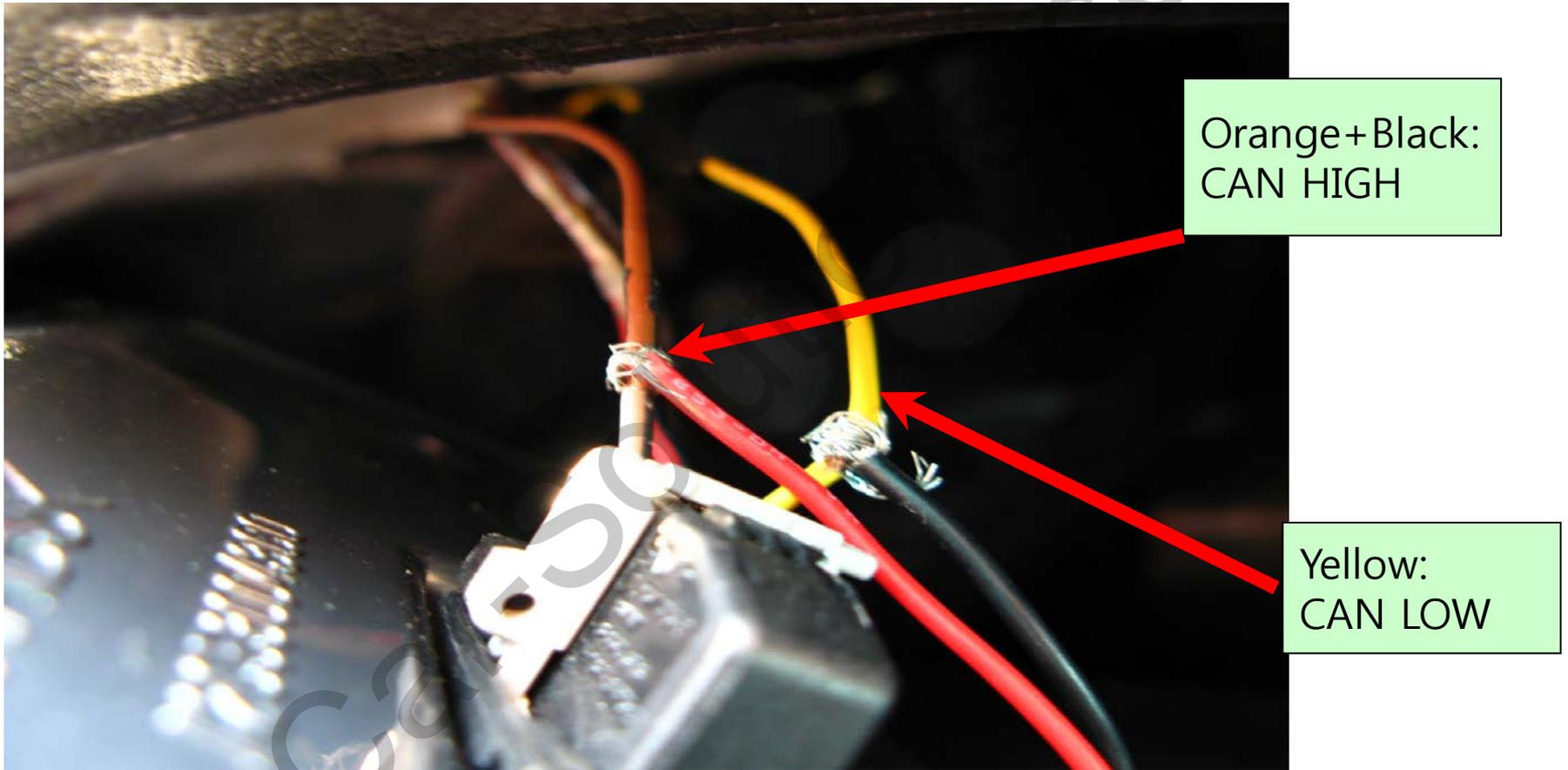
Control the frequency by "UP", "Down" keys.

At the bottom, you can see present FREQUENCY and control it from 87.5MHz to 108MHz. (once pressed 0.1MHz increase)

※If you do not want this function, should set "FM-TX USE" to "OFF" by pressing UP->DOWN on Keypad

Installation

E60 CAN Wiring 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 to manufacturer.)

Q. I can watch the rear camera on the screen

A. Set the DIP switch #7 as state "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 to manufacturer.

Q. Screen only displays white color.

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

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

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

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)

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

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