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MODEL : QVL-MB10-RND-V1 / Product code : MB10-RND-V1-1001-000

MB10

(W221 2010 MODEL)

Specification & Installation

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

2. Output Spec.

- 1 x CVBS OUTPUT
- 1 x Audio OUTPUT
- 1 x LCD OUTPUT(LCD Operation)

3. Power Spec.

- Input Power : 18V
- Consumption Power : 12WATT, Max

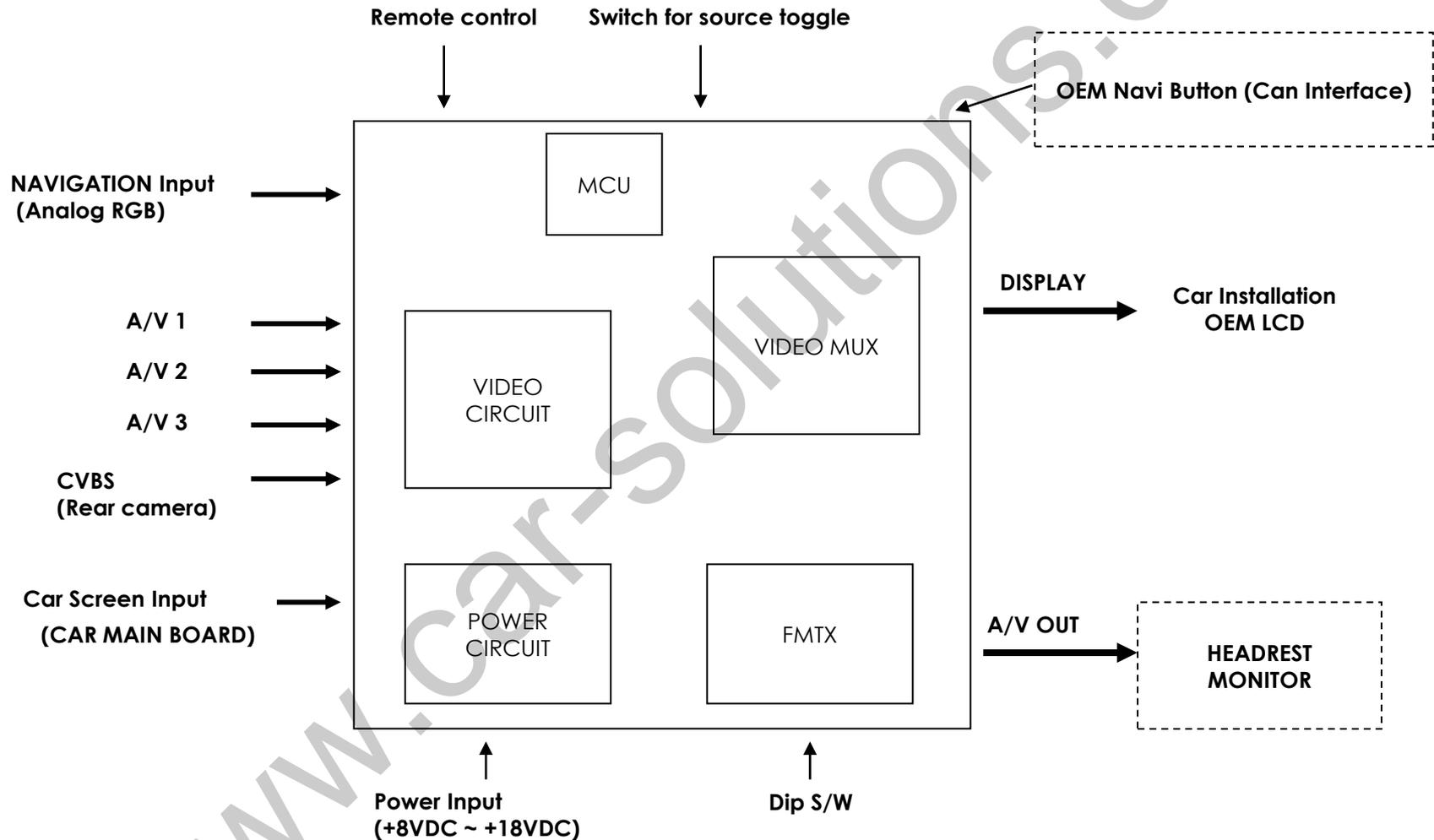
4. Mode Switching

- Possible to skip AV source while switching Mode (AV source) by DIP S/W (Refer to the DIP S/W page)
- Able to change modes by Original button of the car through CAN (W221(8")) : NAVI Button)

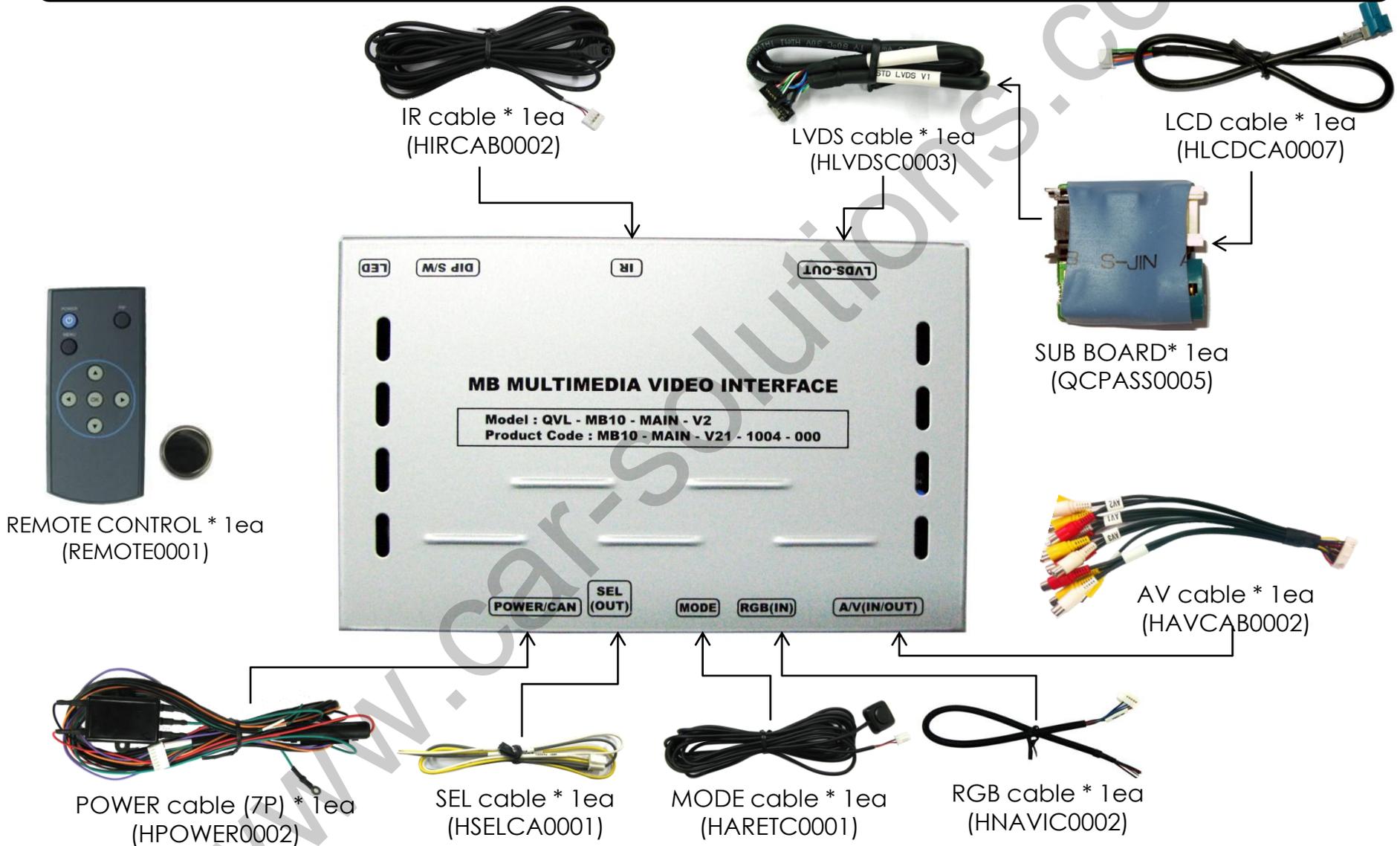
1.2 Features

- More convenience to install with plug & play (HSD cable offered)
- Possible to move the displayed position of DVD, Navi
- NAVI Model Selection (WQVGA, WVGA)
- +12V Output (From Navi, AV1 , Rear (For Rear Camera power)

1.3 System diagram

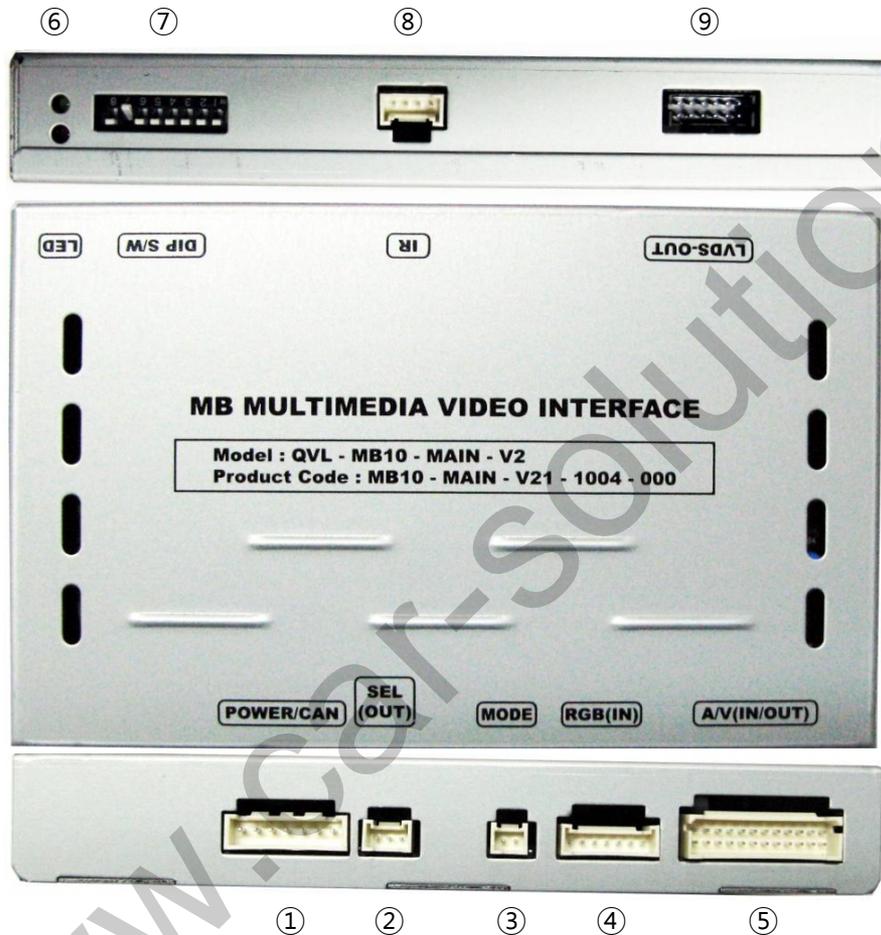


1.4 Components



support@car-solutions.com

1.5 Exterior



Dimension

Horizontal length 153mm
Vertical length 90mm
Height 21mm

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

2.1 DIP switch

#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		N.C
6		N.C
7	Rear Mode	ON : External Rear Camera OFF : OEM Rear Camera
8	OEM Navi Mute	ON : In case of OEM NAVI installed OFF : In case of OEM NAVI not installed

※ ON : DOWN / OFF : UP

※DIP S/W Use Example

- . Use Input Mode : A/V3(DVD),Navigation (RGB)
- . Rear Camera : When to be installed on CVBS 4
- . When original Navi is not installed

- ▷ 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 → OFF
- ▷ DIP S/W : 6 → OFF
- ▷ DIP S/W : 7 → ON (enable CVBS4)
- ▷ DIP S/W : 8 → OFF



2.2 Remote control usage

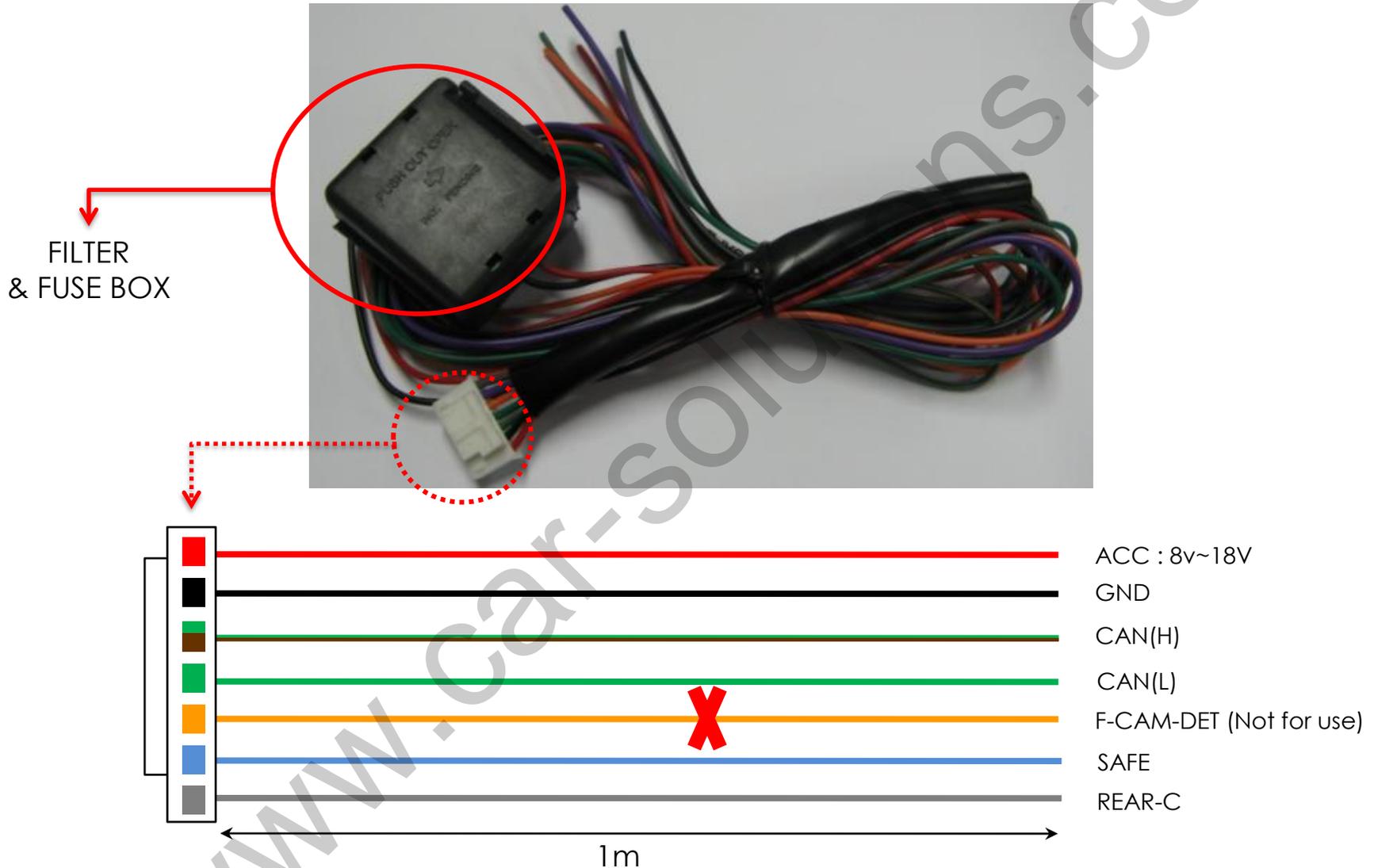
Key	Function
POWER & PIP	Unavailable
MENU	Activating OSD menu
OK	Making a selection, changing image display
▲	Moving upward
▼	Moving downward
◀	Moving leftward (If you press this button 5 seconds long, you can get access to the factory mode.)
▶	Moving rightward (If you press this button 2 seconds long, you can reset all the data about user environment.)



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

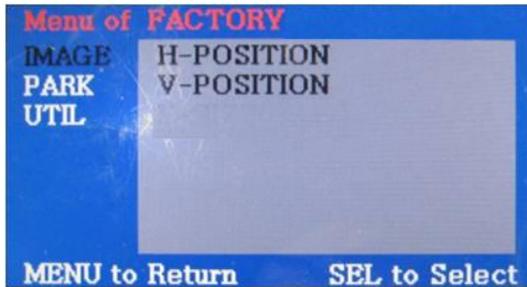
: Operated by pressing ▲ → ▼ → ▲ → MENU button or press ◀ more than 5seconds long on the remote controller.

2.3 Power cable



2.4 Setup for car model & navigation

FACTORY mode – Press ◀ button 5 seconds long or press ▲ → ▼ → ▲ →MENU on the remote control.



IMAGE

Adjusting the position of navigation

* H-POSITION

: moving in horizontal direction

* V-POSITION

: moving in vertical direction

UTIL - NAVI MODEL

Definition of the navigation

- DEFAUTL
- KD680-NEW (for China)
- REXTA (for Domestic)
- MD7000 (for Domestic)

UTIL- FACTORY RESET

: Initializing of all values of OSD setting.

(Impossible to reset of screen position, only possible for functions in OSD)

2.5 Parking guide line setting

FACTORY mode – Press ◀ button 5 seconds long or press ▲ → ▼ → ▲ →MENU on the remote control.



PARK

- * PARK ENABLE : Selecting whether to display the parking guide line or not on rear gear (default : OFF)
- * PARK SETUP : Adjusting the position of the parking guide line (available in PARK SETUP -> V-POSITION, H-POSITION)
- * SAFE ENABLE : In case of Connecting "Safe" wire from the power cable to the hand break,
ENABLE – OEM Picture displays in Drive gear position
DISABLE – No display locked in any gear position

PARK - ENABLE

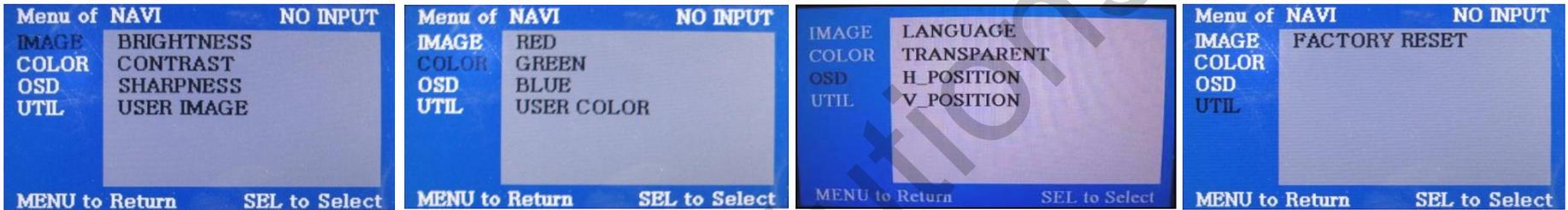
- A. If you set 'PARK ENABLE' as "ON" state, there will be the rear view parking guide line. (as shown left picture)
- B. Press the OK button of remote control, "H_POS" will be shown on the right and control moving in horizontal direction.

PARK - ENABLE

- A. Press the OK button of remote control again, "V_POS" will be shown on the right and control moving in vertical direction.

2.6.1 OSD (on screen display)

Analog RGB Mode



IMAGE

- * BRIGHTNESS
- * CONTRAST
- * SHARPNESS
- * USER IMAGE
: Selecting one among
4 color options.

COLOR

- * RED : Adjusting red
- * GREEN : Adjusting green
- * BLUE : Adjusting blue
- * USER COLOR
: Selecting a color option
among set color options

OSD

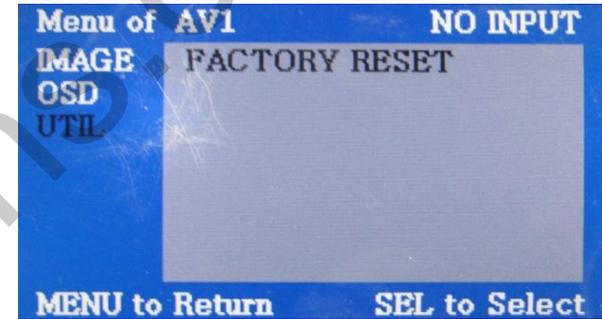
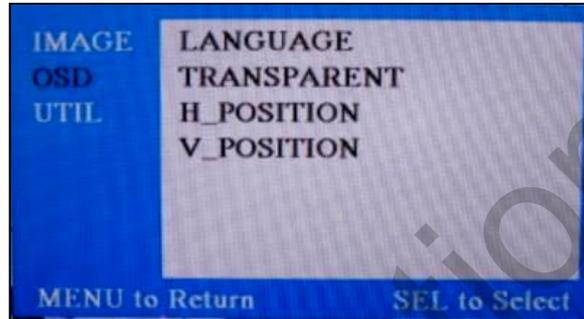
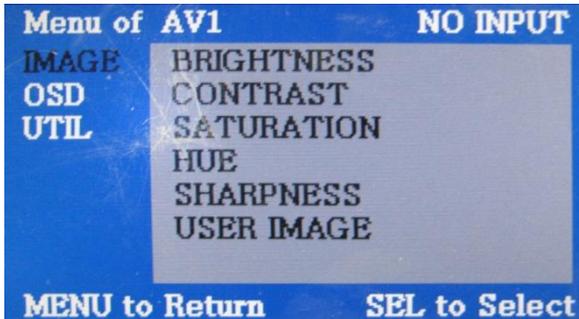
- * LANGUAGE :
Choosing OSD language
while using Touch OSD
(English, Chinese only)
- * TRANS : Adjusting
transparency of OSD
- * H_POSITION, V_POSITION :
Positioning OSD menu

UTIL

- * FACTORY RESET :
Resetting all the data
about the relevant mode
that applicable to
navigation, DVD mode
respectively.
(Impossible to reset of
screen position, only
available for color, OSD
setting)

2.6.2 OSD (on screen display)

Video mode



IMAGE

- * BRIGHTNESS
- * CONTRAST
- * SATURATION
- * HUE
- * SHARPNESS
- * USER IMAGE
: Selecting one among 4 color options.

OSD

- * LANGUAGE : Choosing interface language while changing mode between A/V and DVD
- * TRANS : Adjusting transparency of OSD
- * H-POSITION
: moving in horizontal direction
- * V-POSITION
: moving in vertical direction

UTIL

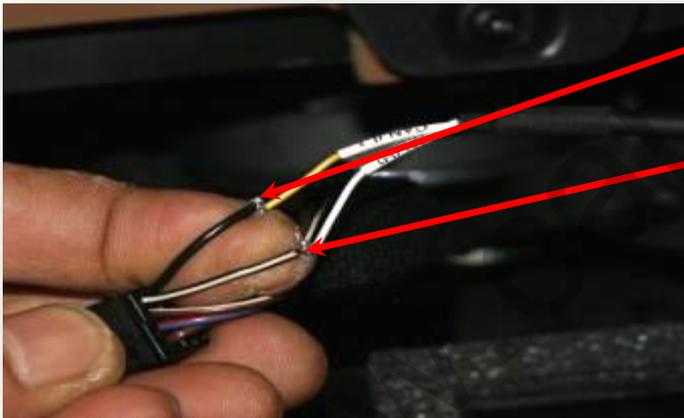
- * FACTORY RESET : Resetting all the data about the relevant mode that applicable to navigation, DVD mode respectively.
(Impossible to reset of screen position, only available for color, OSD setting)

2.7 Switching mode via CAN wire

After wiring CAN of the car with offered CAN cable, you can switch A/V mode by the OEM button as below.



W221 2010model 8" (NEW S-Class) :
Switching Mode by "Navi/Tel" Button as shown left.



Black : CAN LOW (Green)

Black+White: CAN HIGH
(Green+Brown)

- Connect a Green+Brown wire from power cable to a black+white wire from Car (CAN HIGH) and a Green wire to a Black wire from Car (CAN LOW)
- The CAN wires are behind of LCD.

* The color of CAN wires coming from the car can be different by each countries that the car import or any other circumstances.

3. Troubleshooting

1. When can not change mode.
 - Check if the IR Cable (remote control) is connected or not.
 - Check if LED is turned on or not. If it is not turned on, Check if power cable is connected or not.
 - Check if CAN is connected well.

2. When the screen is displaying only black color.
 - Check if 2nd LED is turned on or not. If it is not turned on, please check all video sources that you will connect with the interface is operating well or not.
 - Check if interface is connected well.

3. When displayed color of screen is not proper. (If it's too dark or the color is not proper)
 - Try to push "Reset button" on the remote control. If the color of screen keeps on displaying wrong color, you have to ask manufacturer for the problem.
 - Try to adjust Color, Contrast, Brightness by the remote control.

4. When Back-up camera is not displayed on the screen.
 - Turn Dip S/W no.7 on.

5. When the mode you set is not skip.
 - Check if Dip S/W is set in proper way.

6. When Main screen on the car is not displayed.
 - Check if In/Out cables are connected well.
 - If it keeps showing the same problem, you have to ask manufacturer for the problem.

7. When the screen is displaying only white color.
 - Check if out cable is connected well.
 - If it keeps showing the same problem, you have to ask manufacturer for the problem.