Release date: 2012.02.04
Model: GF08BU-V6.2 / Product code: GF-0811-000

GVIF Video Interface for Opel, Buick, Chevrolet ver. 6.2

Manual

Contents

1.1 Main Specifications

1. Inputs

- 1 x **LX-IN –** *for OEM GVIF signal source*
- 1 x **RGB(IN) –** *analogue RGBs input for navigation system*
- 1 x **REAR-C –** *for external rear view camera, supports NTSC & PAL auto detection*
- 3 x **A/V1..3 -** *for external video sources - DVD, TV, DVB-T; supports NTSC & PAL auto detection*
- 1 x **IR -** *for IR remote controller receiver connection*
- 1 x **MODE –** *for external mode switch button connection*
- 1 x **REAR wire –** *control wire for OEM and external rear view camera activation (REAR-C)*

2. Outputs

- 1 x **LX-OUT –** *for connection to OEM GVIF signal receiver - monitor*
- 2 x **A/V** *(video/audio output for headrest monitors)*
- 1 x **NAVI-SEL wire** *(in RGB mode 12 v are applied. Max load current – 500 mA!!!)*

3. Power

- Input power: 10 V DC ~ 16 V DC
- Consumption power: 6 W (max)

4. Modes switch

- Video input disable: possible to skip each input source by adjusting DIP switches
- Control by using the remote controller
- Possible to switch between modes by remote mode switch button (**MODE)**

1.2 Features

- **Installation near GVIF signal source – OEM Navi unit**
- Plug & Play connection to GVIF wiring

- High image quality

- Auto detection of input video signal video standard (PAL\NTSC)

- Remote controller

- Modes switch via remote button (MODE)

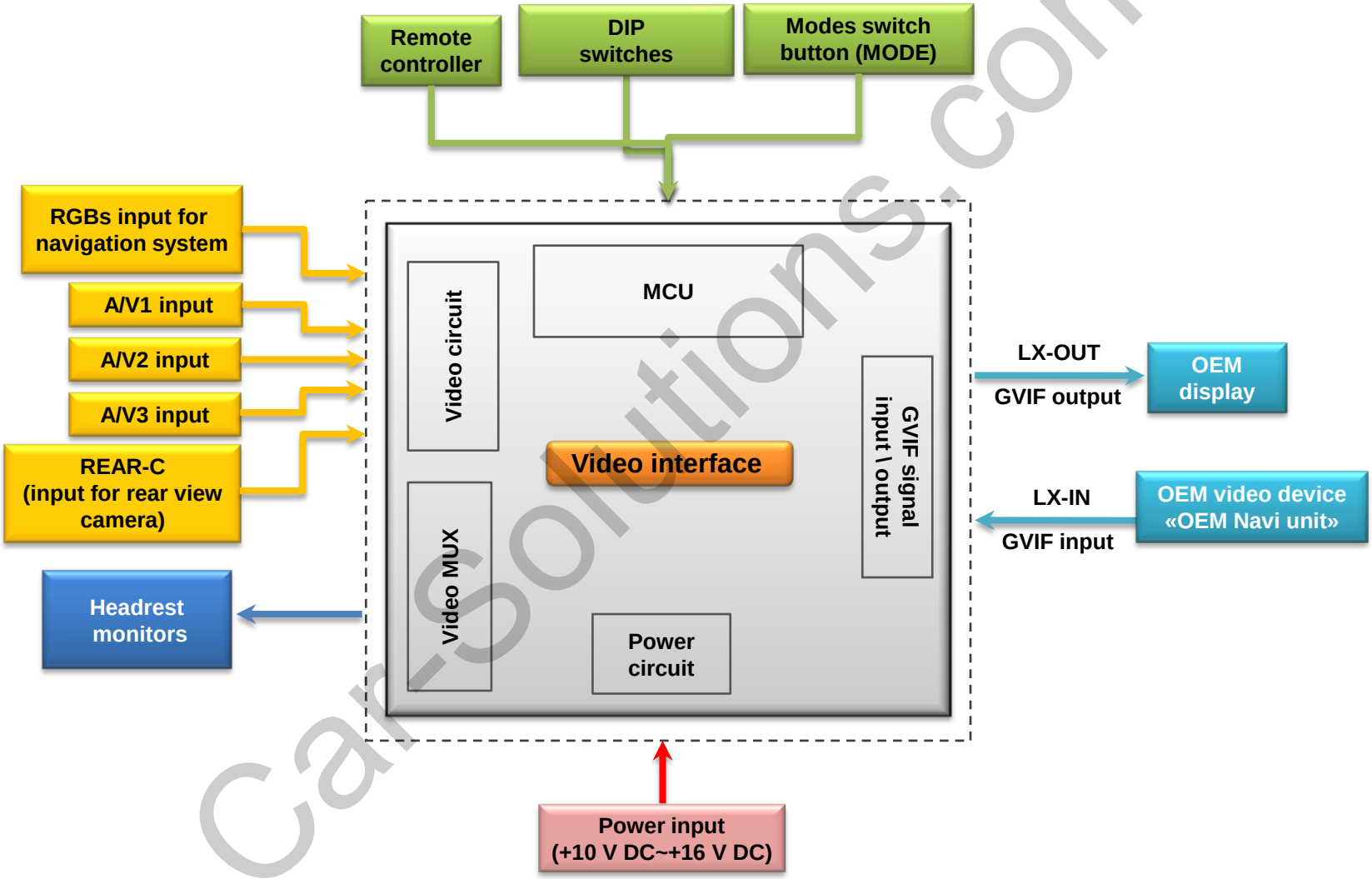
- Improved OSD menu

- Possibility to adjust position of image from AV1-4, RGB sources

- Possibility to work in OSD menu without image display on the screen

- Built-in FM transmitter for audio playback by OEM audio system **(optional)**

1.3 System Diagram



1.4 Package Content

IR receiver *1 pc.

Remote controller * 1 pc

GVIF cable * 1 pc.

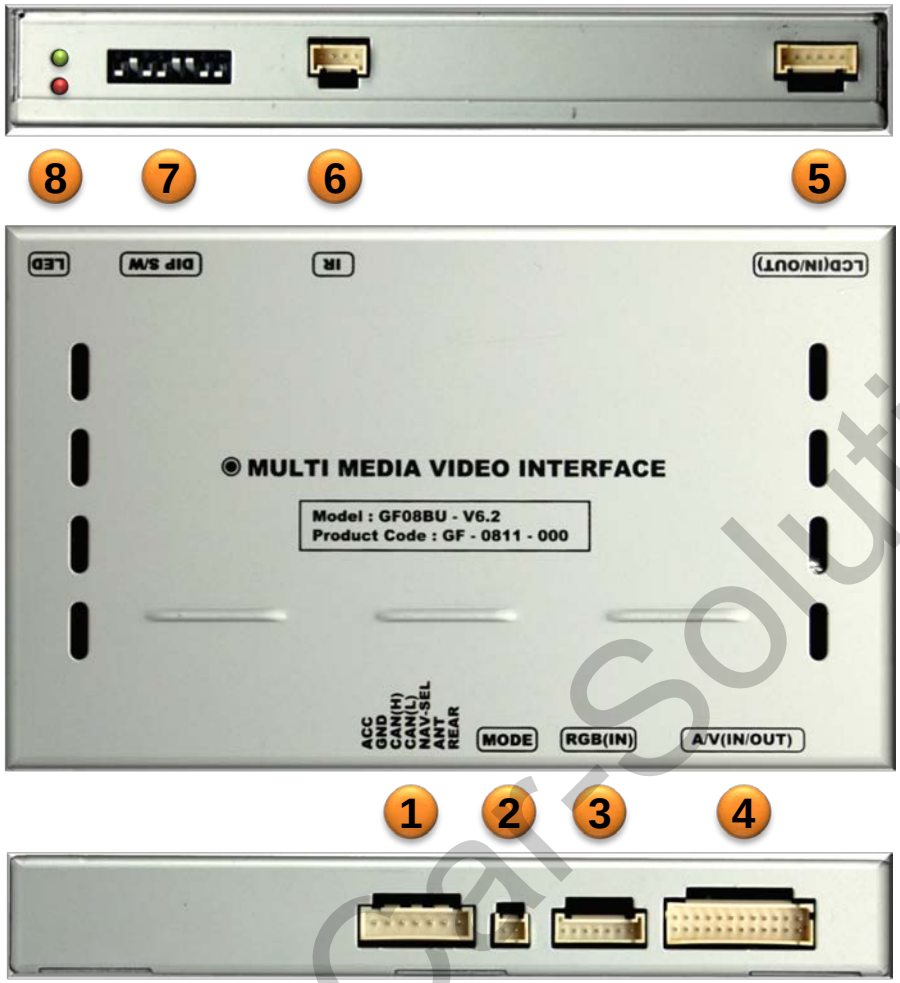
Power cable * 1 pc.

Modes switch button * 1 pc.

RGB cable * 1 pc.

AV cable * 1 pc.

1.5 Exterior

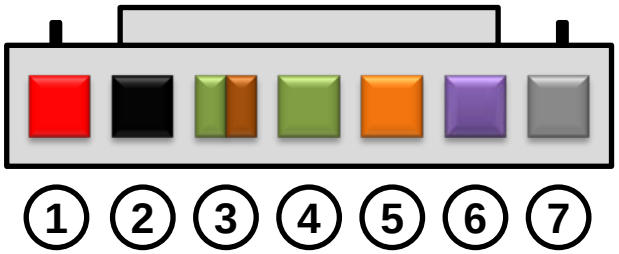


Dimensions	
Length	139 mm
Width	87 mm
Height	24 mm

1	Socket for power and control signal connection
2	Socket for **MODE** remote button connection
3	Socket for device with RGBs signal connection, e.g. CS9100 navigation box
4	Socket for devices with composite video signal connection – DVD, TV…
5	Socket for GVIF video signal “Y connection”
6	Socket for IR receiver connection
7	DIP switches for video interface setup
8	Upper LED – power Lower LED – video signal availability on selected video input AV1..AV3, RGB

1.6 Power Cable

Power cable pinout (from wires side)



Contact No.	Wire indication	Purpose
1	ACC	Connection to car power supply **+12 V**
2	GND	Connection to car power **-12 V**
3	CAN (H)	Connection to CAN bus **(NOT USED)**
4	CAN (L)	Connection to CAN bus **(NOT USED)**
5		Wire-antenna of built-in FM transmitter **(OPTIONAL)**
6	SAFE	Safe mode activation wire
7	REAR-C	Wire of rear view camera (REAR-C) activation on AV cable

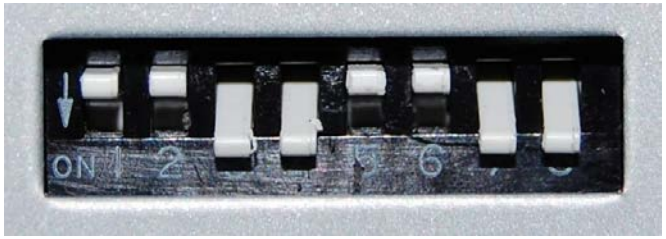
2.1 DIP Switches

DIP No	Position	Function
1	ON	RGB input OFF
	OFF	RGB input ON
2	ON	AV1 input OFF
	OFF	AV1 input ON
3	ON	AV2 input OFF
	OFF	AV2 input ON
4	ON	AV3 input OFF
	OFF	AV3 input ON
5	ON	Display resolution: 800x480
	OFF	Display resolution: 480x234
6	ON	OEM GVIF input OFF
	OFF	OEM GVIF input ON
7	ON	Additional rear view camera is used
	OFF	OEM rear view camera is used
8	DIP SWITCH IS NOT USED	

Example of DIP switches setup on Opel Insignia:

- Inputs to be used: OEM video input, RGB input for CS9100 navigation box, AV1 input for DVB-T receiver, REAR-C input for additional rear view camera.

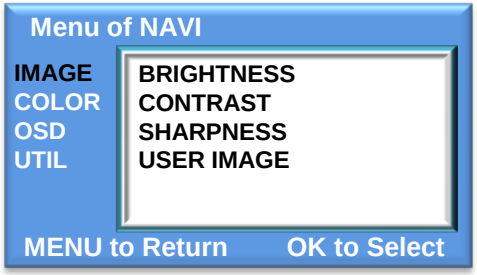
- **DIP S/W : 1 → OFF** (RGB input ON)
- **DIP S/W : 2 → OFF** (A/V3 input is ON)
- **DIP S/W : 3 → ON** (input is not used)
- **DIP S/W : 4 → ON** (input is not used)
- **DIP S/W : 5 → OFF** (display 480x234)
- **DIP S/W : 6 → OFF** (OEM input is ON)
- **DIP S/W : 7 → ON** (REAR-C input is ON)
- **DIP S/W : 8 → ON** (DIP switch is not used)



2.2 Remote Controller

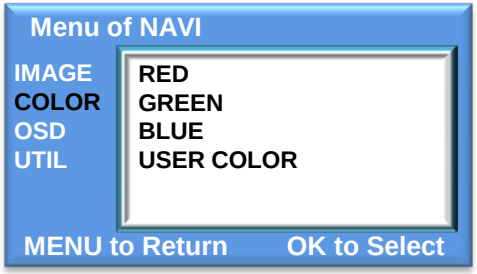
Buttons	Function
POWER & PIP	NOT USED
MENU	OSD menu
OK	Mode selection or switch
▲	Up
▼	Down
◀	Left *(hold for 2 s – factory menu)*
▶	Right *(hold for 2 s – factory reset)*

2.3 OSD Menu in RGB Input Mode



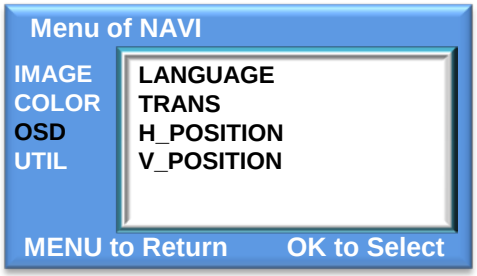
Press "MENU" button on remote controller to enter OSD menu.

BRIGHTNESS – image brightness setup
CONTRAST – image contrast setup
SHARPNESS – image sharpness setup
USER IMAGE – selection of existing setup profiles: DEFAULT, USER1..USER3



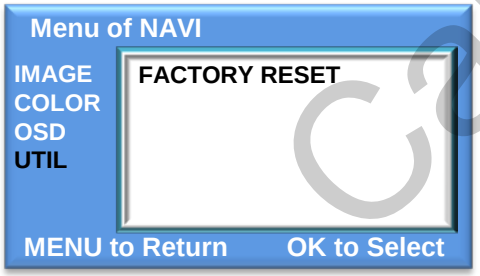
Press "MENU" button on remote controller to enter OSD menu.

RED – red colour adjustment
GREEN – green colour adjustment
BLUE – blue colour adjustment
USER COLOR – selection of existing colour profiles: DEFAULT, USER1..USER3



Press "MENU" button on remote controller to enter OSD menu.

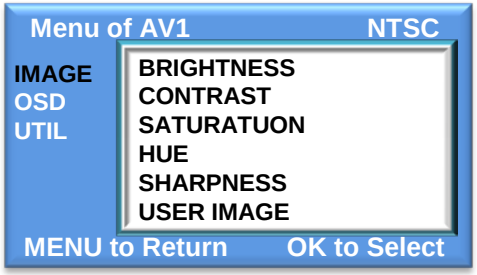
LANGUAGE – OSD menu language selection
TRANS – adjustment of OSD menu transparency
H_POSITIONS – adjustment of OSD menu horizontal position
V_POSITIONS – adjustment of OSD menu vertical position



Press "MENU" button on remote controller to enter OSD menu.

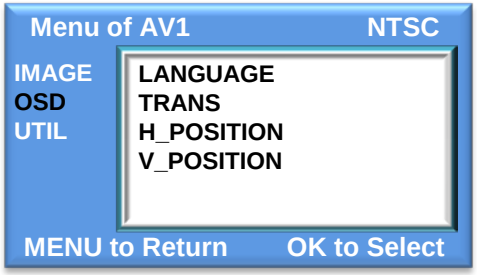
FACTORY RESET – factory settings restoration

2.3 OSD Menu in AV1...AV4 Input Mode



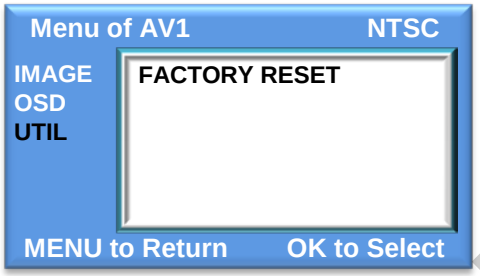
Press "MENU" button on remote controller to enter OSD menu.

BRIGHTNESS – image brightness setup
CONTRAST – image contrast setup
SATURATION – image saturation setup
HUE – image hue setup
SHARPNESS – image sharpness setup
USER IMAGE – selection of existing setup profiles: DEFAULT, USER1..USER3



Press "MENU" button on remote controller to enter OSD menu.

LANGUAGE – OSD menu language selection
TRANS – adjustment of OSD menu transparency
H_POSITIONS – adjustment of OSD menu horizontal position
V_POSITIONS – adjustment of OSD menu vertical position

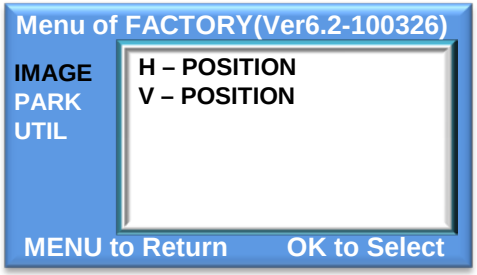


Press "MENU" button on remote controller to enter OSD menu.

FACTORY RESET – factory settings restoration

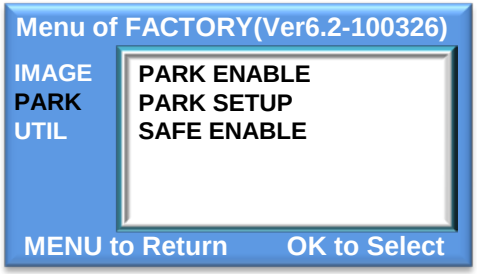
Note: OSD menu and factory menu (Menu of FACTORY) can be entered in the mode of external rear view camera connected to REAR-C input on AV cable. W hen OSD menu is activated in rear view camera mode, menu window heading writes «Menu of AV4».

2.4 Factory Menu



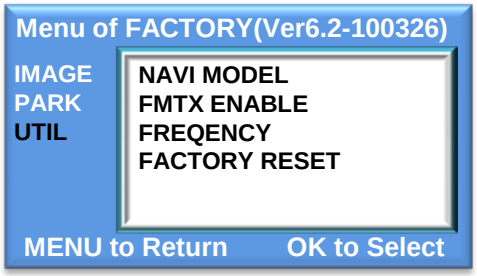
Press ◀ **button on remote controller for 2 seconds to enter factory menu.**

H-POSITION – image horizontal alignment *(AV1, AV2, AV3, REAR-C, RGB inputs)*
V-POSITION – image vertical alignment *(AV1, AV2, AV3, REAR-C, RGB inputs)*



Press ◀ **button on remote controller for 2 seconds to enter factory menu.**

PARK ENABLE – rear view camera (REAR-C) parking guidelines activation
PARK SETUP – rear view camera (REAR-C) parking guidelines setup (see page *14)*
SAFE ENABLE – Safe function activation (does not allow you to watch video in motion from AV1-AV3 video inputs)



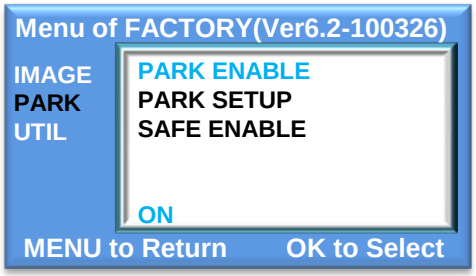
Press ◀ **button on remote controller for 2 seconds to enter factory menu.**

NAVI MODEL – resolution selection on RGB input: **DEFAULT** – 400x240, 480x240
FMTX ENABLE – built-in FM transmitter activation **(optional)**
FREQENCY – FM transmitter frequency setup
FACTORY RESET – restore factory settingsвосстановление заводских настроек

Note: OSD menu and factory menu (Menu of FACTORY) can be entered in the mode of external rear view camera connected to REAR-C input on AV cable.

2.5 Rear View Camera Parking Guidelines

Press ◀ button on remote controller for 2 seconds to enter factory menu.



When everything is connected (rear view camera is connected to REAR-C input, grey wire of REAR-C activation is connected to rear lamps, DIP switch is set as OFF), put reverse gear.
Connect IR receiver to video interface. Press ◀ button on remote controller for 2 seconds to enter factory menu. Using “Up”, “Down” and “OK” buttons go to “PARK” and activate parking guidelines.

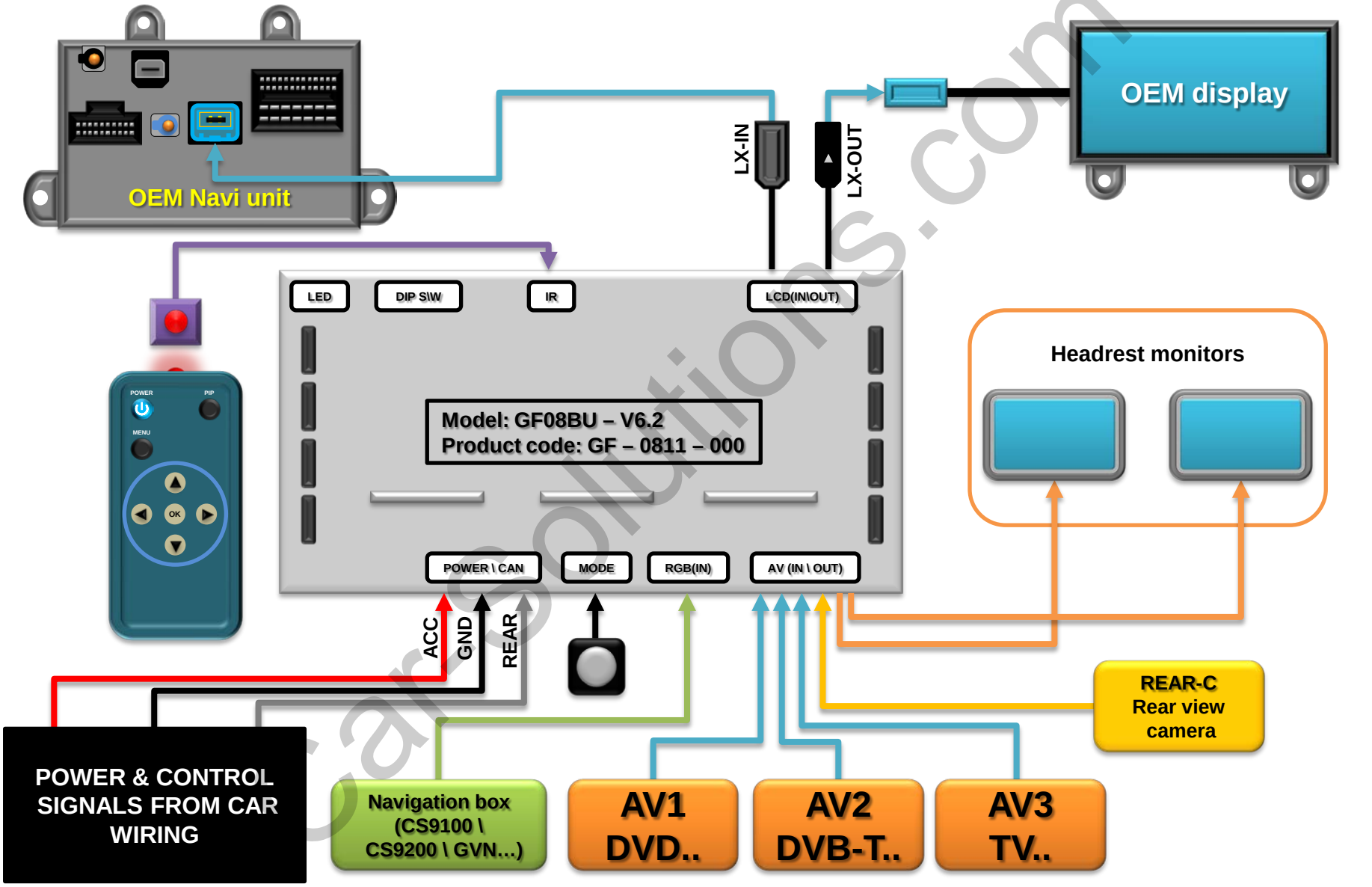
Then select «PARK SETUP», where you can adjust parking guidelines position which will further correspond to maximum and minimum allowed distance to the obstacle during reverse parking.
Using “OK” button select adjustment of horizontal position of parking guidelines and adjust them using “Up”, “Down” or “Right”, “Left” buttons. To do this put obstacle on a fixed distance which will further correspond to the certain mark.

Using “OK” button select adjustment of vertical position of parking guidelines and adjust them using “Up”, “Down” or “Right”, “Left” buttons. To do this put obstacle on a fixed distance which will further correspond to the certain mark.

3.2 Installation and Application Tips

- Please, check package content when receiving the product. In case something is missing, inform supplier or manufacturer.
- All steps of installation should be done by well-trained specialist.
- Ignition key should be taken off before starting installation, interface power connection must be the last step in installation.
- Power cable should be disconnected during interface installation.
- There should be no electronic devices or magnetic pole around the installation place.
- The device is not meant for usage in wet environment. Installation should be performed inside the car.
- Dismantling without manufacturer's permission can not be guaranteed. (No permission to break attached warranty label on the board.)
- According to our sales policy any problems caused by user's mistake or carelessness c annot be guaranteed.

3.1 Installation Diagram



4. Troubleshooting

B: I cannot switch between video sources.
O: Check MODE switch remote button cable. Make sure that DIP switches are set correctly.
Try to switch video inputs by remote controller. In case all above-mentioned measures do not fix the trouble inform the supplier or manufacturer.

B: Display shows only black or white screen.
O: Check whether the second LED lamp is on. If it is off, check connected video sources operation. The second LED lamp shows whether the connected video sources operate, namely, their synchronization. In case all above-mentioned measures do not fix the trouble inform the supplier or manufacturer.

B: The display shows only vertical lines (white or coloured).
O: Check GVIF cable connection and integrity. Replace GVIF cable.

B: Displayed colour is not proper.
O: Restore factory settings in OSD menu and (or) in factory menu. In case these measures do not fix the trouble inform the supplier or manufacturer.

B: Rear view camera image is not displayed (from additional or OEM camera).
O: Check DIP switch #7. Make sure grey **REAR-C** wire is connected correctly.

B: Image from incorrect (not the one selected) video source is displayed.
O: Check DIP switches settings. Video sources switching order when all video inputs are activated: **OEM image->RGB->AV1->AV2->AV3->OEM image…**

B: OEM image is not displayed.
O: Check LCD IN/OUT cable connection. Swap the places of red and white wires in LCD IN/OUT cable as shown on page 18. Replace GVIF cable. In case all above-mentioned measures do not fix the trouble inform the supplier or manufacturer.

5. Possible Problem with GVIF Cable

Problem: **OEM video signal passes through video interface but image from connected devices (RGB, AV1..AV4) is not displayed**

Solution: **Swap the places ot the white and red wire in LCD IN/OUT cable.**

Note: Appearance and wires colour may change depending on the video interface version and products lot!