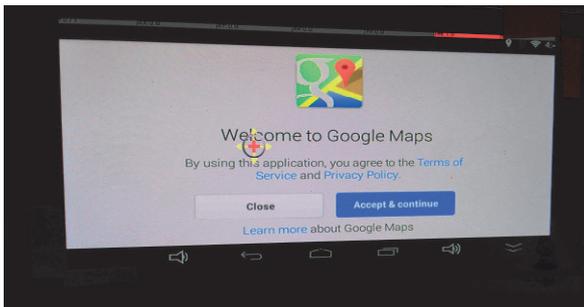
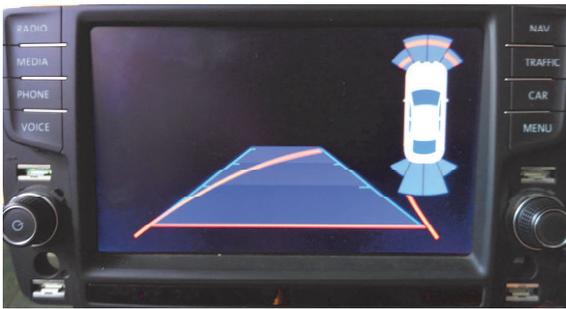


# Installation Manual\_v20150926

This interface can insert video into 2016-audi[including A6,Q7,A3,A4 etc, which is based on MIB system], and 2013-volkswagen monitors.[the 4Pin round connector version in Volkswagen, skoda, seat, cars ]. This product offers RGB-navigation, android navigation, DVR, TV,DVD and reverse video insertion onto the OEM screen.

This product is an upgrade version from the previous model, we made the following changes: harness inserted behind the CD, automatic reverse with guideline and PDC, OEM knob or touch pad to control WinCE/Android navigation. And it is easy for the installer. Just power and video harness inserted, DIPs set, then go.



For Audi series:  
The OEM touchpad or knob is used to control the installed navi/android.

For VW:  
The OEM touchfoil is used to control the installed navi/android.



The DVD/DVR/TV can also be controlled by OEM touch foil in VW or Touchpad/knob in Audi cars.

## Features:

- ✓ This Interface fits all VW and Audi MIB and MIB car screens. No matter what resolution they have. MIB includes Golf7, Skoda etc, MIB2 includes 2016 A4,A6,Q7. They may have quite different LCD size[like 5.8 for Golf, 8-inch for VW] or resolution[for example the very high resolution Q7 and A4 screens].
- ✓ The OEM touch foil of touchpad or knob can be used to control the installed navi/android system:
  - For Volkswagen: OEM touch is used to control the map.

- For Audi like A3,A4,A6: this interface has dedicated control logic, people can use the OEM knob to control the map operations, which makes the install no risk because nothing replaced especially in the motorized monitor with glass cover. An cursor will be overlaid on picture so all types of aftermarket map can be used.
- ✓ Digital navigation module is embedded inside, the wiring job is simple and easy for the installers, and this digital module gives very clear picture with HD map on the 5.8 Golf/Skoda screens. OEM speaker is used to insert the navigation sound so no external tiny speaker is used.
- ✓ Music/Movies files can be played by the offered SD card slot or USB socket in FN and FaN series. The internal CPU can handle all these kind of files, while most new cars does not have a DVD player inside today. The AUX output connector make audio go to the OEM speaker in a HD way. Also OEM touch or knob is can be used to control the player without searching for remote controller.
- ✓ The CAN box is used to generate reverse signal, so camera installation is easy and just plug-and-play. Guideline and PDC can be displayed at the same time.
- ✓ The installer can also make the box work without CAN bus connected:
  - he supplies the power on BATT/ACC pins, and set green wire[Reverse in] pin to >5V. then the camera-in picture is displayed. He may also use the external keypad to switch. In this case, no CAN code is needed.
- ✓ The FaN series has android module inside, with wifi, GPS and Bluetooth functions, so this device and be used to deliver high quality Android picture on the car screen, sound of audio/video files can be played onto the car speaker by Bluetooth. And the GPS can be used to generate internet navigation pictures and displayed on car screen in a HD way. The live-traffic information can be received by wifi connection to the hot-spot of a mobile phone. The detailed manual of android navigation module can be requested from sales people.
- ✓ An high resolution scaler is used inside, the RGB input can be connected to a wireless mirrorcast dongle via a HDMI input cable. The smartphone's display can be mirrored onto the car screen with 1080P or 720P delivery so no picture quality is hurt. Both Android and iPhone can be mirrored. The installer can buy the mirrorCast dongle from or directly inside his local market.
- ✓ The installer can also buy MHL to HDMI conversion cable to mirror the phone onto the car screen. Both iPhone and Android phones can be mirrored.



1. 8-DIP settings On interface box:

DIP	Down side (=ON)	Up side (=OFF)
1	RGB input enabled	RGB input disabled
2,3	AV1/2 input enabled	AV1/2 input disabled
4	HDMI input enabled	HDMI input disabled.
5	CAMERA-in CVBS is displayed when in reverse. [this is for the case aftermarket camera is installed]	Car oem picture is displayed when in reverse.
6	Down=Q7 very high resolution LCD The A4 8-inch LCD should also go in this mode.	UP= not in Q7 very high resolution mode, then DIP7/8 works
<b>DIP78</b> <b>7, 8</b>	DIP8=UP: 7inch or 8-inch LCD in cars. high resolution monitor. DIP8=DOWN: 5.8-inch LCD in cars. Normal resolution monitor. The DIP7=UP: for Volkswagen cars, this DIP should stay high. The DIP7=DOWN: for Audi MMI 3G/4G cars, this DIP goes low.	

## 2. The 4-Pin DIP for CAN.

[when changed, the installer should re-insert the power cord to reboot this box.]

DIP	Down side (=ON)	Up side (=OFF)
1	The OEM-touch foil or OEM-Touchpad or OEM-knob is used to control the installed navigation/DVR.	The added touch foil for navigation/android.
2	Not used inside.	Not used inside.
3	MIB2 when decoding the OEM touch. For VW-2016 etc.	MIB when decoding the OEM touch. This is for Golf7 e.g.
4		Should be in OFF. Otherwise the CAN decoding will not be working.

Some specific settings.

- when the installer just install a camera for the car,  
all 4DIPs should stay UP.[off]

when install navigation/DVR with control:

- if the car has no OEM touch, and the installer added a touch foil, e.g. Audi A6,A3:

DIP1: should stay UP=added touch foil, no when the user controls touchpad/knob, no commands will be sent to the navigation module.

It reads only the added touch foil.

DIP2: not used.

DIP3: not used,

DIP4: should stay UP, otherwise it goes into factory upgrade mode.

- if the car has OEM touch foil, e.g. Golf7 and VW-2016 with 6.33inch LCD.

DIP1: should stay Down so the OEM touch foil is used for navigation.

DIP2: not used.

DIP3: Up=Golf7 and Down=2016 VW MIB2,

DIP4: should stay UP, otherwise it goes into factory upgrade mode.

- the car has no OEM touch, the there is touchpad or knob and the users want that to control the device .e.g.Q7-2016 or Audi A3.

DIP1: should stay Down so the OEM touch pad/knob is used for navigation.

DIP2: not used.

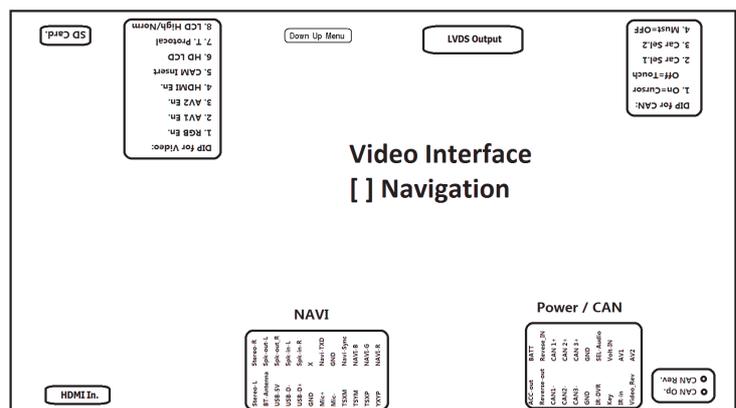
DIP3: does not matter.

DIP4: should stay UP, otherwise it goes into factory upgrade mode.

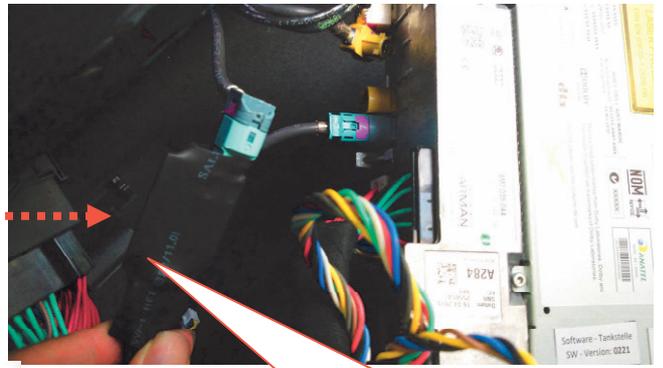
- The Pin descriptions below:

The installer can manual make the interface display 360 surround view without the can functions.

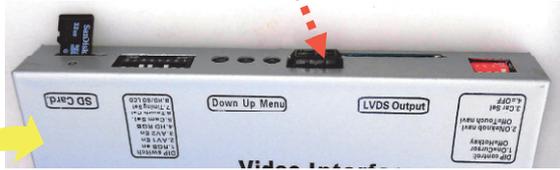
In this case, he supplies the power on BATT/ACC pins, and set green wire[Reverse in] pin to >5V. then the camera-in picture is displayed.



4. System connection:

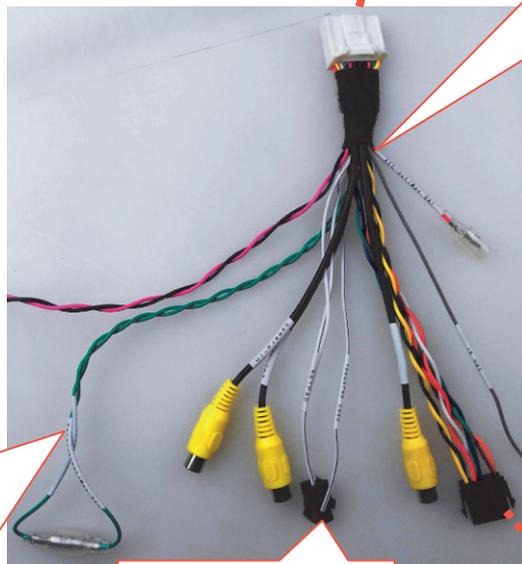


The interface's video harness and power harness should be inserted behind the CD, then the installation work is basically done.



the "ACC-OUT" wire[Red color]: can be used to give power to accessories[max. 1A].

the "IR-out" wire[white with black strip]: can send IR commands to DVD/DVR/TV. It can command 5 devices at the same time maximum.



These green wires are reverse volt output and input. It can give power to camera also. The installer can also force manual camera display by giving a 12V to the Reverse-IN wire.

External keypad for switching.

2X2 plug is used for left-front speaker to give navi sound, when inserted onto 2X2 socket of navi harness.

This power/CAN harness should be inserted on the power socket behind CD.



- For FN and FaN series [with internal WinCE or Android navigation]: four accessories are included.:



**Connection to the Navi-harness:**



4pin added touch foil connector, e.g. A6/A3 has no OEM touch foil while the user wants touch control.  
Please set DIP1=UP for the CAN-Dips.

USB socket: for media/Movie files inside the player. The FN and FaN series has a strong CPU to play all media files.

Stereo output: when multimedia files are played, this connector can be used to deliver HD sound to the car speakers.

MIC: this is used for the voice-control of the android navigation inside.

This 2X2 socket is for the plug on power harness so left-front speaker is pulled to give navi talk-over.

8pin analog RGB input:  
this is for connecting or 3<sup>rd</sup> party navigation unit. The 6<sup>th</sup> pin[TXD] carries the protocol for navi operation.

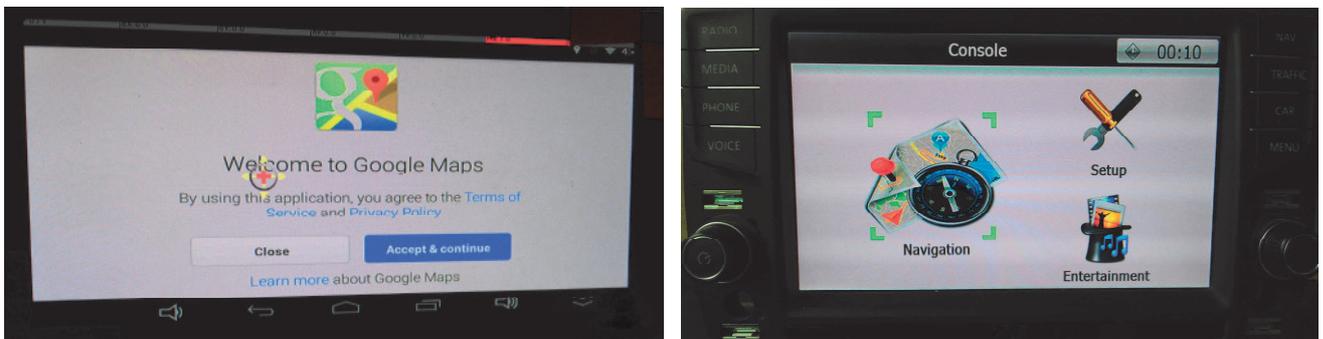
**5. User's operations:**

(1) Switch :

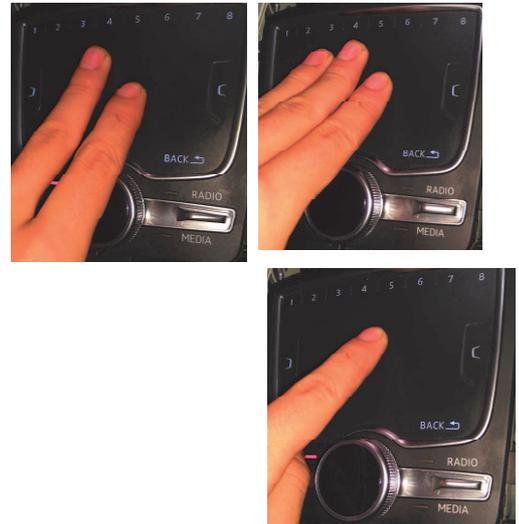
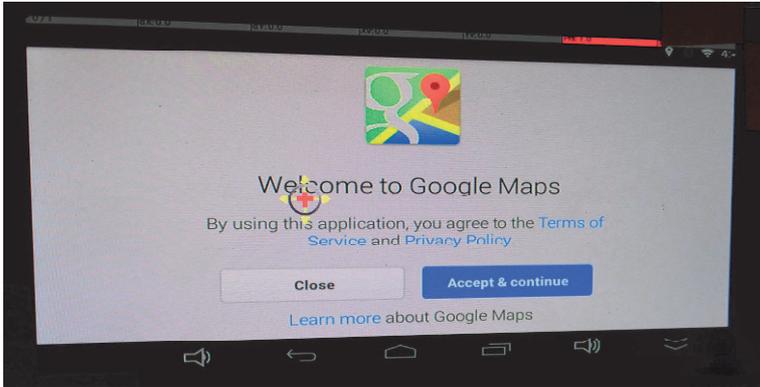


- Menu or NAVI: when pressed once, the interface will traverse among the inputs.
- Radio/Media/Tel: when pressed, the interface shows the OEM picture.
- The user can also use the keypad to switch.

(2) Installed navigation operation modes. [CE or Android]



- For the Cars without OEM touch foil, but there is touch pad.[e.g. Q7-2016]
  - ✚ The internal android module has been tuned nicely to work with touch pad.
  - When pressed with 2-finger at the same time, and dragged into any direction, there will be a cross displayed on LCD and goes together in the same direction as the user.
  - When pressed with 1-finger and dragged in any direction, the android module inside will get a sliding-command in the same direction as the user operation.
  - When pressed with 3-fingers at the same time, the internal android module will get a click command at the cursor location.

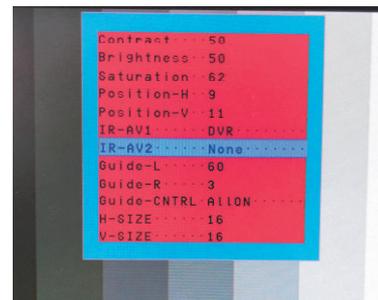


- ✧ For cars without OEM touch foil or touch pad, but there is a knob. [e.g. Audi A3]
  - Knob rotate-left, rotate-right, will make the cursor go left, or go right respectively.
  - Upper left, upper right will make the cursor go up/down respectively.
  - Press the knob will make an execution operation just like touching the LCD on that place.

This kind of control gives the installer the freedom to use whatever map in the aftermarket.



(3) DVR/ TV /DVD Operation modes.



- For Cars with OEM touch foil, e.g. Golf7 [5.8 or 8inch LCD], or VW-2016[6.33-inch LCD]:
 

When in AV1/2: the user press any location on the LCD, some icons will pop up on the screen like the picture shows, the user press any icon, then one IR command will be sent on the While/Black strip wire.["IR out" mark is on that wire]. This wire can be connected to the DVD/DVR device then it can be controlled.

The installer should pop up the OSD menu by the 3 keys on interface to select the device type. Many DVD/TV/DVR's IR code are programmed inside. He just pickup the correct one which matches the connected device. He may also select None if he does not want this function or prefers a remote controller.

The AV2 input has the same setup as AV1, the installer picks up the device name, then the IR code matches. The IR code is sent on the same white/black strip wire. The interface can maximum connect to 5 devices at the same time, since IR is a protocol with many pulses. The outside device on AV2 will not have extra behavior if command to AV1 is sent.

- For cars without OEM touch foil, e.g. Q7, A3, A4:

When in AV1/2: the user Rotate/Press the knob or the keys on the right picture, then one IR command will be sent on the White/Black strip wire. ["IR out" mark is on that wire]. This wire can be connected to the DVD/DVR device then it can be controlled.



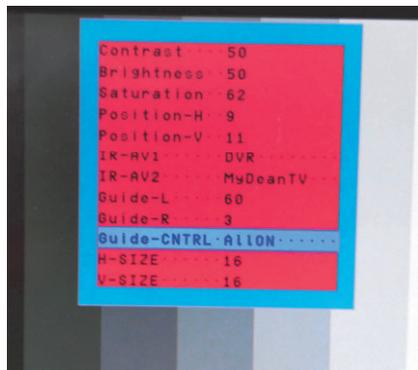
#### (4) Reverse

When the driver goes to R, the green wire from can box will become 12V. This wire can power on a camera, also it will force the interface into reverse picture display.

- When DIP5=OFF[UP state], the interface assumes that the car has OEM camera, and the OEM picture will be displayed.
- When DIP5=ON[Down state], the interface assumes that the car has NO-OEM camera, and the inserted "Camera-IN" CVBS video will be displayed.

The installer can use the OSD menu to say he wants guide line/PDC or not.

- All-ON: both guide line and PDC are displayed.
- PDC-ON: only PDC displayed.
- Guide-ON: only Guide-line displayed.
- ALL-Off: guide line and PDC will not be displayed.



## 6. Parameters

No.	name	parameter
1	RGB map resolution	800X480 HD suggested.
2	Av1, , cam video	0.7Vpp with 75 ohm impedance NTSC/PAL/SECAM automatic switch
3	GPS antenna	5V active antenna from the golden finger connector.
4	Reverse Control wire	>5V will force into camera mode. All these wires can tolerate 12V for <10 seconds.
5	Normal Power consumption	4.8W
6	Standby current	< 10uA
7	Reverse trigger threshold	>5V trigger
8	Work temperature	-40 ~ +85C
9	Size	15.2 * 9 * 2.1CM
11	USB	OTG function,1A output with surge of 3A.
12	Compatible with maps	Navione, navitel, Igo, Primo.sygi, etc.

## 7. simple manual about the winCE navi module.

- (1) How to update the module software:

Copy the files that provides into a SD card.

When the units power on, the users may see this picture. He just wait the start Up screen shown again.



- (2) How to make a start up Logo:

Make a directory named YP\_A5, and put all the file that supplies for a boot.

The logo.BMP contains the logo. Please be sure it must be 800×480, BMP format, and 16 bit in color.

- (3) The functions of the icons.

The left picture shows the start up picture, the user may go to each icon to get their respective function.

When the navigation map is inserted the first time, the user may click the navigation icon, and the right-side



picture will show up, the user should select the \*.exe file to run the map. All the other functions are self-explained in the menu.