

FN_Rover_Jaguar Installation Manual_v20150926

Product Type: FN-Rover-Jaguar-2016, [with internal navigation module]
FaN-Rover-Jaguar-2016, [with internal android navigation module]
FV- Rover-Jaguar-2016 [Video interface without internal navigation]

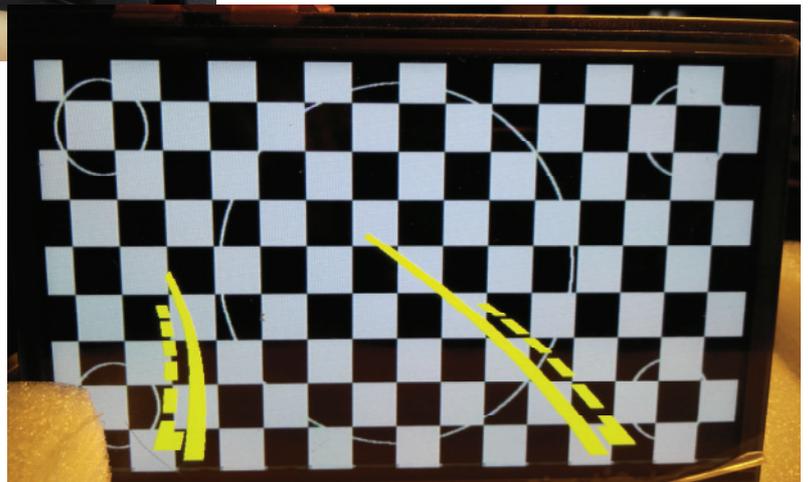
This interface can insert video into Rover-Jaguar 2016 car screens[e.g. Jaguar XE,], the OEM touch can be used to control the installed device.[Navigation, Android module, Reverse video, DVR, DVD,MP5 player or TV etc.]

- For Rover Jaguar before 2016,[the feature of car-2016 is: there is only one 6-pin connector behind monitor], please use FV-Rover-Jaguar-MixCam.



Rover-Jaguar 2016 car screens,
The navi key or the Home key can be used to switch the video.
The Oem touch screen is used to controlled the installed Navi or MP5 player or DVR/TV.

When in Reverse, the guidelines can be displayed.



Features:

- ✓ 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 car LCD. OEM speaker is used to insert the navigation sound so no external tiny speaker is used.
- ✓ The OEM touch foil of touchpad or knob can be used to control the installed navi/android system:
- ✓ 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 can 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	This DIP is not used.	
DIP78 7, 8	These 2 DIPs are not used.	

The 4-Pin DIP for CAN.

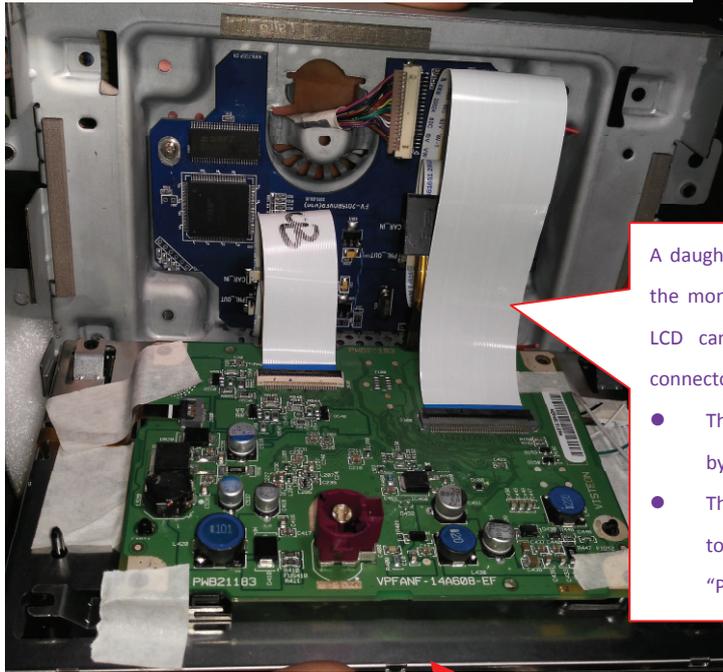
[when changed, the installer should re-insert the power cord to reboot this box.]

DIP	Down side (=ON)	Up side (=OFF)
1		No function.
2		
3		
4		Should be in OFF. Otherwise the CAN decoding will not be working.

Some specific settings.

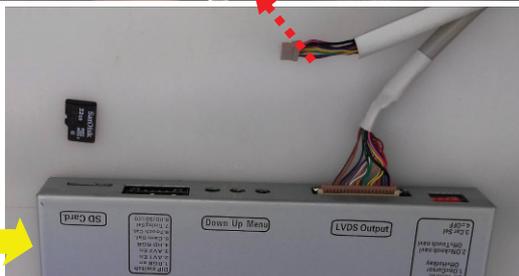
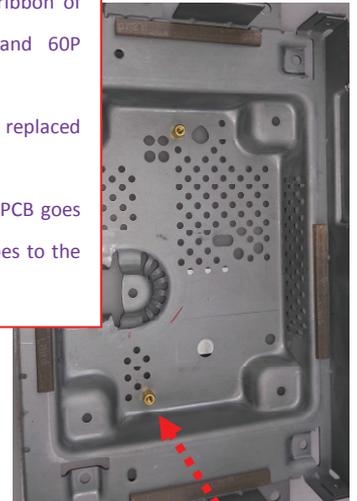
- when the installer just install a camera for the car,
all 4DIPs should stay UP.[off]

2. System connection:



A daughter PCB is installed on the rear shell of the monitor, so the video and touch ribbon of LCD can go through by the 45P and 60P connectors.

- The 45P Ribbon to LCD should be replaced by the 2-ribbon of this PCB.
- The 60P ribbon of the daughter PCB goes to PCB while the OEM ribbon goes to the "PNL-OUT" socket.

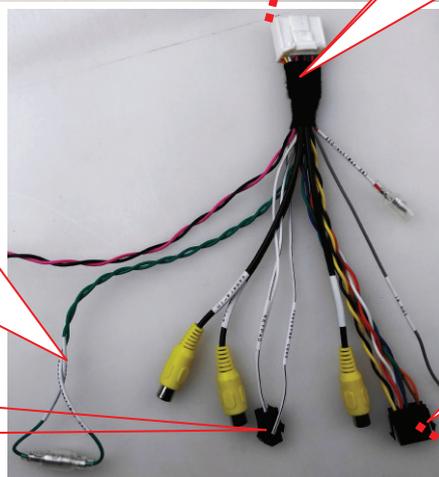


the "ACC-OUT" wire[Red color]: can be used to give power to accessories[max. 1A].

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.



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.
This connector should not be used since there is already OEM touch on the monitor.

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 3rd party navigation unit. The 6th pin[TXD] carries protocol for navi operation.

3. User's operations:

(1) Switch:

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

(2) DVR/ TV /DVD Operation modes.



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 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.

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.

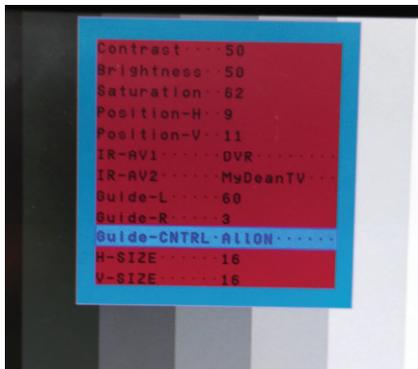
(3) Reverse

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.



4. 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.syctic, etc.

5. 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.