## RL3-JAG17 interface manual\_v(170201)160808

This interface can insert video onto Rover Jaguar wide car screen, specially designed to insert Blind spot camera video, high-definition phone picture mirroring, DVR, and 360 bird view pictures.



Phone mirroring display

360 bird view display

Features :

- Very easy to install, just make the power harness go between the connector behind AirCon harness, and daughter PCB go between the OEM ribbon for LCD, then installation is done.
- Especially design for such scenarios :
  - (1) Installing bird view or DVR.
  - (2) Phone picture mirror onto OEM screen with HD display. [phone mirror devices can work together with this device], even navigation text can be shown clearly on this LCD thanks to the HD-RGB delivery, and much easier to read than a phone since the LCD is much bigger. The phone's touch screen is used to input the address, and the module is compatible with all smart phones, since it uses the phone's projecting or airplay function.
- The Steering wheel's "MODE" key is used to switch, and the extra keypad can also be used to switch.
- Manually ACC and reverse function is also offered, which makes this interface fits almost every situation. The installer can disable the automatic reverse and make a manual reverse by giving 12V to a green wire. there is also a "manual ACC" wire if

there is also a "manual ACC" wire if desired.

The inserted picture and OEM picture mixed display together so the OEM warning message can be visible all the time.



## 1. ACCESSORIES



1.The Left side is the power harness 【

- The square connector should be wired behind the Air-Con controller plastic piece.
- "Camera-in" socket is for external 360 bird view input, the other yellow RCA-jacks are DVR or TV-tuner input.
- The green "Reverse-in" is for manual 360 bird view trigger, =12V will force bird view displayed.
- 2. The Extra keypad [for input switch, if the "MODE" on steering wheel is not desired to use.]



2. DIP settings :

4-BIT DIP settings : 【the red one on the right picture】 No function, should all stay UP.

8-BIT DIP settings : 【the black one on the left picture】





DIP	ON-side (DOWN)	OFF side (UP)
1	RGB high definition port is enabled	RGB port disabled
2,	AV1 enabled	AV1 disabled
3	AV2 enabled	AV2 disabled
4	DOWN=RGB port 【360 high definition bird view】	UP= CVBS [camera-in] video displayed when in reverse
	picture displayed when in reverse.	
5	When in Reverse(Green=12V),show inserted RGB	when in reverse(Green=12V) show OEM picture.
	or CVBS based on DIP4	
6,7,8	No functions, should stay UP.	

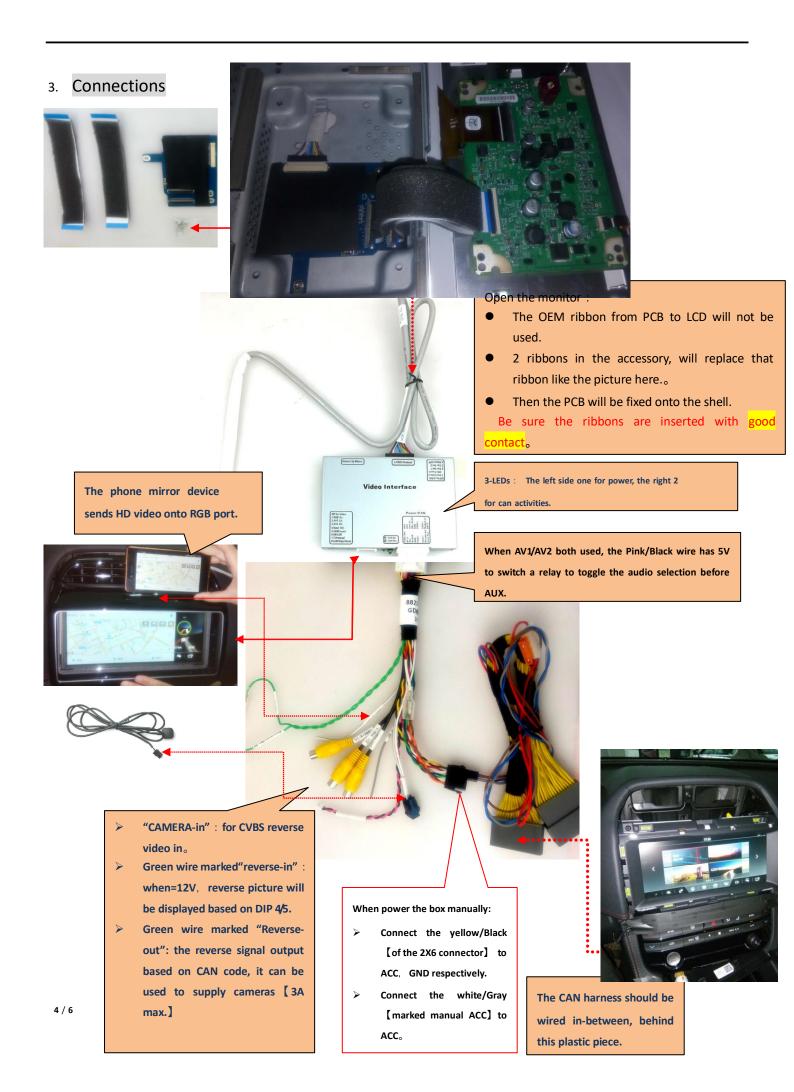
The Function of DIP1/2/3 :

With the extra keypad, or the OEM "Call-off" key on steering wheel, the installer can switch in the inputs: "OEM $\rightarrow$ RGB $\rightarrow$ AV1-AV2 $\rightarrow$ OEM", the DIP 1, 2, 3 to enable the RGB, AV1, AV2 respectively.

The RGB port is suggested for phone-mirror device, although it can also use AV1 or AV2 [this port has very high resolution display compared with CVBS. The viewers can even see navigation text clearly on car screen.]

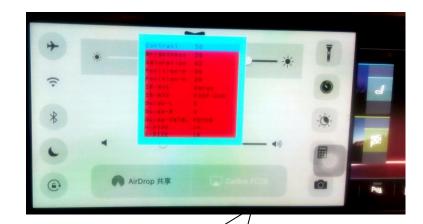
AV1, AV2 can be used to connect to TV or DVD, or 360 bird view.

Application examples	DIP 1, 4, 5	
Only reverse video	[DIP5 DOWN,	Cvbs goes from "camera-in",
installed	4UP, 1UP】	Green wire=12V to show reverse video $_{\circ}$
Only 360【CVBS】	[DIP5 DOWN,	Cvbs goes from "camera-in"
installed	4UP, 1UP]	Green wire=12V to show 360-CVBS video $_{\circ}$
Only phone - mirror	【DIP5 UP,	The phone-mirror device goes to RGB port.
installed	4 DOWN, 1DOWN]	
Phone mirror + 360 bird view	DIP5 DOWN,	The user press keypad or Call-off to show RGB-port picture.
installed.	4UP, 1DOWN]	The Green wire=12V to show CVBS on "camera-in" port.



## 4. The 3 side keys





The input box has 3 side keys, the installer may use it to tune the picture display. The first 3 options have separate state memory.

The modification of one input is different not affecting others.

- The 3 side keys are : menu, +,- respectively. When menu is press, OSD strings will pop up on screen, and the installer may adjust the best video effect. The +/- will change the value.
- The brightness/contrast/saturation tunes the color of the current video input.
- The position H,position V set the image position on screen.
  It can not be adjusted on this model which is better for installing and reliability.
- Size H, Size V are for picture size fine-tune adjustment.
- Guide-L : option: set the left guide line's offset on screen, when the value changes, the guide Line location moves horizontally on screen.
- The Guide-CNTRL option: set the PDC and guide line display on/off on screen for inserted reverse. This option should be set to off since all F-pace has already a reverse camera.

## 5. Parameters

#	name	parameters	
1	Video amplitude	0.5—2Vpp with 75 Ohm	
2	Power consumption	4.8W [0. 4A @12V]	
3	Stand by current	< 10uA	
4	Work temperature	-40°C − +85°C	
5	Dimensions	8.8cm * 6.6cm * 2.7cm	
6	CVBS	NTSC suggest.	
		PAL acceptable.	
6	RGB protocal	Stand VESA VGA protocal with 800X600@60Hz: Pin <mark>1</mark> , 2, 3, 4, 5, 8 are: Red, Green, Blue, Hsync, GND Vsync:	