

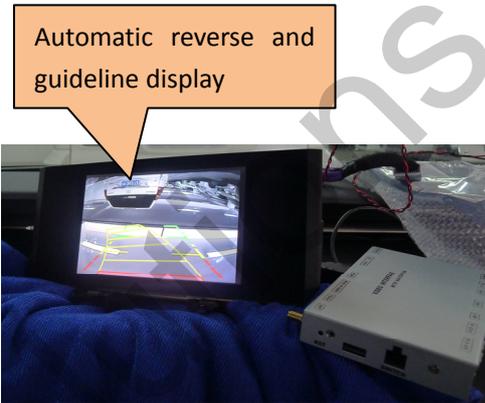
# FN-Lexus2014 Installation Manual\_v20130710

[Product type: FN- Lexus2014]

This interface can insert high definition RGB navigation video, AV and reverse camera video onto 2014 lexus GVIF car screens. It includes the built-in GPS module.

### The features of this interface are:

- It is an upgraded version from the previous successful GVIF interface, when DIP6,7,8 all OFF, this interface fits lexus-2014 screens[37 Mega pixels], when DIP6 is down, the DIP7/ 8 still works the same, and supports 33M pixels GVIF screen, and 8M pixel screen, so this interface so far can insert picture on all GVIF screen, including previous lexus, buick regal/lacrosse, Chevrolet, discovery3 etc.
- The specific lexus-2014 can box makes this interface has automatic reverse function, and parking guideline display.
- Internal navigation module makes the installation simple and easy.
- also provides a specific plastic front face with touch panel inside, which can be used for the operation of navigation.



## 1. System connection

This plug should be inserted onto monitor's rear socket.

4-wire touch

Audio switch

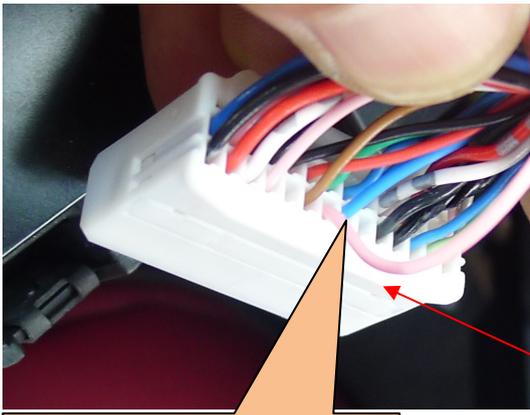
Plug to monitor inserted here so video can be switched.

SD card of the map

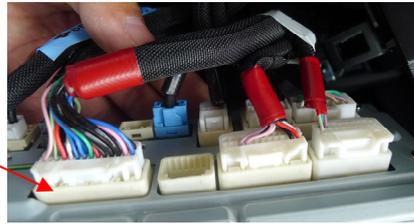
This OBD connector should be inserted to OBD socket under steering wheel. White wire is for steering wheel button switch.

CVBS

ca m

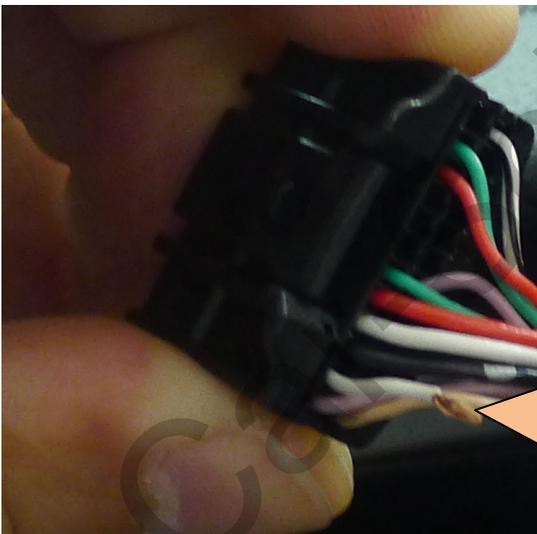


The white wire should be connected to this pink wire behind CD.



The CAN box's OBD connector should be inserted here, fixed with a type for stability.

**The Wire Description of 6p to interface:**  
**Yellow:** constant power of 12V。 **Black:** to GND。  
**Red: ACC (key power):** When screen is on the line voltage is 12V and when it is off the line voltage is 0V.  
**Green:** Reverse signal wire [=12V when in reverse] or 1A, with auto switch for reverse. It can also be connected to the reverse light to trigger reverse video.  
**White:** witch signal wire, when = 12V or 5V, this interface switches. Also can connect to the external keypad to switch.  
**Gray:** CAN box dedicated data signal to the interface box. This wire carries guideline values from the can box to interface box.



Lexus2014 monitor's power connector:  
**The 2<sup>nd</sup> pin from the left on the top row should be cut off when interface is connected, otherwise the installer sese screen ON-OFF once every seconds.**  
 This wire is used to carry backlight signal, when interface is connected, this signal is already generated by the GVIF connector. The installer can also use the 1<sup>st</sup> pin on CTRL port[this pin goes to 5V when in inserting mode, =0V when in car mode] to drive a relay to cut off this wire.

## 2. DIP settings:

This interface can insert video onto all GVIF car screens today in market, it is an upgrade version from the previous stable and successful GVIF interface. The DIP6,7,8 should be handled carefully to get this versatility.

this interface can insert video onto lexus-2014 LCDs[37M pixel clock], 2012 lexus/Toyota GVIF screens[33M pixel clock], also in Opel, Buick,Chevrolet,discovery3 and many other cars. And 8M pixel clock screens like Opel DVD900, and buick lacrosse before 2014.

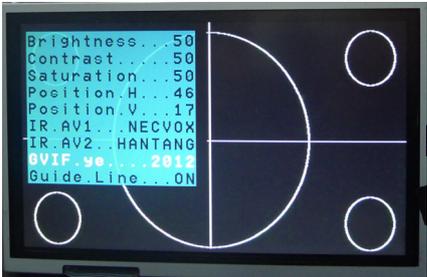
If DIP6/7 is set wrong, white/Black screen may be seen. DIP8 set wrong will also lead to black screen or

multiple pictures on the same screen. The installer just try DIP678 to be correct position, he does not need to repower the interface. Wrong DIP settings will not damage anything including interface and car OEM components.

DIP	=ON side (DOWN)	=OFF side (UP)
1	RGB Enabled	RGB disabled
2,	AV1 enabled	AV1 disabled
3	AV2 enabled	AV2 disabled
4	RGB=High definition RGB The recommended definition for this interface: 800X480]	RGB=Normal definition NTSC
5	Reverse signal (green wire=12V) switch to CAM video	Reverse signal (green wire=12V) switch to OEM video
6	When DIP6,7,8 are all UP, the output is for lexus2014 screen.[pixels clock=37M]	When DIP6 is set ON, the pixel clock is 33M or 8M, which is controlled by DIP8, and the protocol can also be changed by DIP7. Which makes this interface works the same as previous interfaces.
7,8	7up: GVIF new protocol. 7down, GVIF old protocol. 8up: panel with 800X480[eg Malibu, Lexus2012, Toyota, Discovery3 and etc.] 8down: panel with 480X240[eg. Buick Lacrosse, opel DVD900]	

### 3. Side Menu Key Settings:

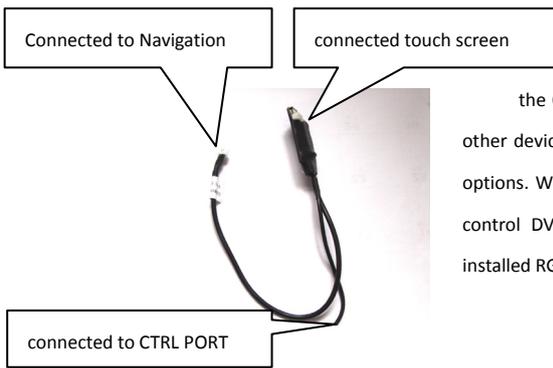
- When menu key is pressed, OSD strings will pop up on screen, and the installer may adjust the value through +/-.
- The first 3 options can be used to tune the picture.
- The menu Pos.H, Pos.V: Users can set the position of the image on the screen, Continue to adjust until achieve optimal screen position
- The Reverse Guideline settings can be used to switch the guide ON/OFF.
- The "GVIF year.....2012/2014" option can be used for the GM new GVIF protocol, like in the GL8. it can make big horizontal picture shift when set wrong.
- The DVD/TUNER/NAVI is to set the IR code output, there is already different AV codes inside the interface, through which can use OEM key to control.
  - When **not** set to "none", the DVD/TV control icons will pop up, and the installers may use OEM key to control installed devices.
  - When set to **"none"**, the DVD control icons will not pop up.
  - When set to **"Prog"**, the installer can use DIP6=DOWN to program the IR code into the interface. So DVD can be controlled by OEM keys.



### 4. CTRL PORT:

This is an 8-pin extra CTRL port on the interface, usually does not need to use in normal situation. But users

can also use it to get extra functions. For example connecting to the daughter touch board would use OEM touch screen to control installed DVD or other devices.



the CTRL port can be connected to the left touch cable, so DVD and other devices can be touch controlled. There is a touch signal switch for 2 options. When touch the screen in AV1, it will show like right picture, can control DVD and when in other inputs, can use the touch screen for installed RGB navigation.



**Ctrl port signal definitions:**

Pin 1,2	+5V output voltage for relay(Max 3A output) When AV1 is selected=5V, AV2 is selected=0V	Car AUX input, can insert external sound directly, if use 2 or more sound channel inputs, can switch by the +5V voltage relay.
3:	Constant +5V	Max output 2A
4, 8	GND	
5:	Dedicated control bus. Useful when converting the OEM touch screen to control the installed DVD or digital TV.	Should not be connected to GND, otherwise CPU will halt.
6:		
7	=5V when in RGB or AV(inserted video mode), otherwise =0V	( Max 3A )

**5. 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	15.8 * 9 * 2CM
11	USB	OTG function,1A output with surge of 3A.
12	Compatible with maps	Navione, navitel, lgo, Primo.sygic, etc.