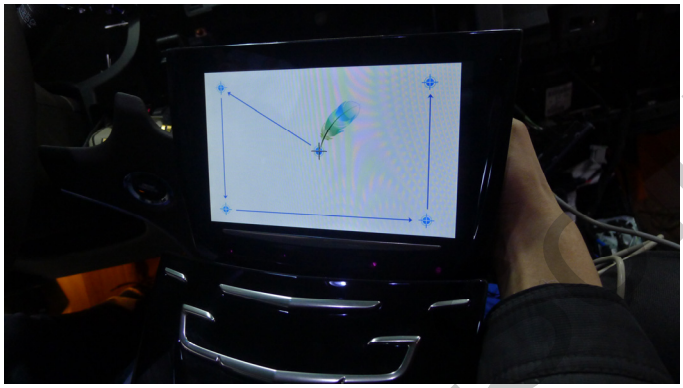
CF-V-FS-CAD-CUE-NAVI

CF-V-FS-CAD-CUE

This interface can insert video into 2013-Cadillac monitors. This offers RGB-navigation onto the OEM screen, also DVD/TV videos can be inserted. This interface also has the following features:

- All Plugs are Cadillac2013 specific, so the installers does not need to open the OEM monitor, so the installation process is risk-free.
- OEM touch panel will be used to control navigation for FN-cadillac's internal navigation module. all touch operations in inserted video mode will not make background control to the OEM CD/Head unit, becauses of the dedicated CAN-bus blocking function for inserted video inside.
- FN_ Cadillac2013 has internal navigation module, which simplifies the system wiring. may also offer customers software to update the navigation module, so it supports Igo, Navitel, Primo, and etc. all these are controlled by the OEM capacitive touch panel. may offer the UART protocal of control to other 3rd party developers so they can insert whatever device onto this monitor.
- The Can bus will generate automatic reverse video, channel switch signal, and parking guidelines.

Cadillac LCD show inserted navi



8-inch show reverse video+guidelines

1. DIP settings

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	RGB input= VGA resolution 800X480	RGB input= NTSC resolution 400[or 480]X240。
5	AV4 video is selected when green wire goes to 12V.[this is for the case aftermarket camera is installed]	Car oem picture is selected when green wire = 12V.
6	Set to ON once for IR programming.	Set to OFF for normal use.
DIP78 7，8	Both DIPs should be set to UP, =OFF.	

2. system connection(for the version without internal navi, the SD slot, navi-antenna,speaker conn. will not be seen.)

The process of getting to the Cadillac video connector is a little complicated, especially XTS, some screws are difficult to find. For the detailed screw-work procedure on Cadillac, please contact the sales people for the PPT pictures.

The 6PIN power connector signal definition between the Can box and interface box：

YELLOW：power supply of 12V BATT。

RED：generated ACC（=12V when key in ignition state）：when=12V，the interface works.

BLACK：Ground to Chassis。

GREEN：Can box generated reverse trigger signal [when =12V the reverse video is enabled]

WHITE：Can box generated switch signal wire, when=12V, this interface switches。[max.25V]

GRAY：CAN box's communication with interface on sharing control signal to DVD/TV on this wire.[if we do not need to idrv to control DVD/TV/iPOD, this wire may be cut off.]

3. User's Control：

The FV-Cadillac2013， the user press the extra keypad to switch.

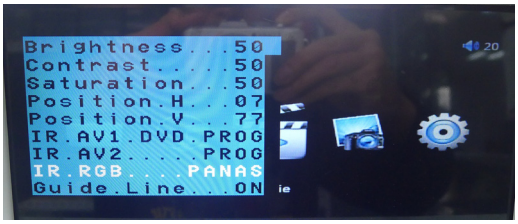
The FN- Cadillac2013: the user long press the right-top corner of the touch panel, then the interface switches.

Reverse signal:

The reverse signal is always generated by the data wire. When the car goes into reverse, the green wire from the CAN box goes to 12V volt.

When in reverse, the CAN box will generate guideline signals to the interface. The installer can use the 3 key buttons on the side of interface to switch it off.

4. the 3 side key buttons



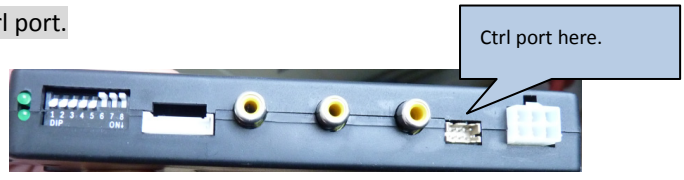
The input box has 3 side keys, the installer may use it to tune the picture display, and touch function for the connected DVD or other devices. The 3 keys are : menu, +, -.

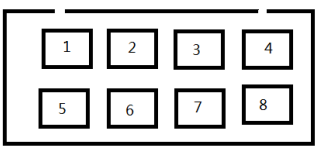
The first 5 options has separate state memory. The modification of one input is different , and it does not affecting other inputs.

- 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 H position,V position sets the image position on screen.
- The DVD/TUNER/NAVI is to set the IR code output to the installed device, so people use original knob to control
- When set to "none", the control icons will not pop out
- When set to "Prog", the installer can use DIP6=Down to program the IR code into the interface, so extra new devices can be controlled.

The last option: "Guide Line……ON": the installer can set ON/OFF to enable the parking guide line, which shows the safe zone when parking

5. The Ctrl port.





The Ctrl port has 8 pins, it is not necessary for the installers to use it in most cases, however it can be used for installer's convenience in case many more extra devices are installed.

Pin 1, Pin2	+5V output voltage for sound switch relay when AV1 is selected, 0V when AV2 selected.	This pin can pull the relay with +5V. [max output=2A, while most mechanical relay only needs 0.1~0.3A.]
Pin3:	constant +5V when the unit is working.	max 2A output.
Pin 4,8	GND	It is tied to GND inside.
Pin 5:	data bus for touch screen	Pin5,6 should NOT be connected to GND, because it will halt the CPU inside. Leave it open for normal use.
Pin 6:	clock bus for touch screen.	
Pin 7	+5V output voltage for touch screen switch relay, when in inserted video mode, this pin=5V, when in original car video mode, this pin=0V.	For imported cars which needs touch screen for installed navigation computer, this voltage can be used to switch the original touch screen. max 2A output.

6. Parameters

No.	name	parameter
1	RGB resolution input	800X480 HD suggested.
2	Av1,Av2, cam video	0.7Vpp with 75 ohm impedance NTSC/PAL/SECAM automatic switch
3	IR output	5V digital infrared control code with 4 data bytes [machine code1,machine code 2, user code, verification code]
4	Control wires	White wire: signal= max 5V. Gray wire: signal= max 5V. All these wires can tolerate 12V for <10 seconds.
5	Normal Power consumption	8.4W [0.7A @12V]
6	Standby current	< 10uA
7	Reverse trigger threshold	>5V trigger
8	Work temperature	-40 ~ +85C