



CAM-AR1-AD

ALFA ROMEO REVERSE CAMERA ADD-ON INTERFACE INSTRUCTION MANUAL



Product Name: CAM-AR1-AD

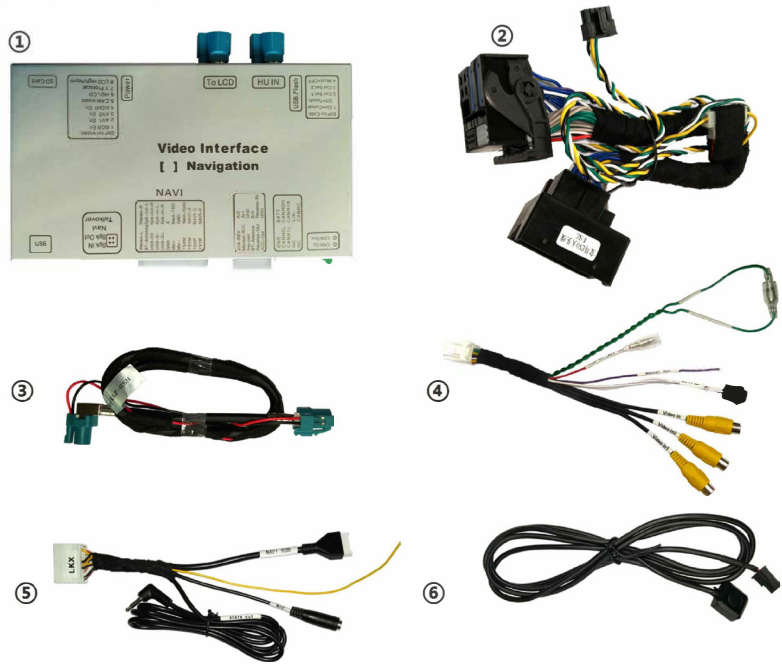
Product Application:

- Add Reverse Camera (for cars without OE Camera) with Auto-trigger and Dynamic Guidelines.

Car Types: New Alfa Romeo Connect 6.5" and UConnect 8.8" 3D NAV systems. This interface fits all Alfa Romeo screen, which has 6pin connector behind LCD. It has 2DIPs to set 3 resolutions to fit these 3 types of LCD.

Alfa Romeo: Giulia, Stelvio

Accessories:



Item	Qty	Description	Part No.
1	1	Interface Box	
2	1	Power CAN Harness	
3	1	6Pin LVDS Cable	
4	1	Video RCA Cable	
5	1	External Navigation Harness	
6	1	External Switch Button	

Specification

For Alfa Romeo Connect 6.5" and UConnect 8.8" 3D Nav systems. One solution can fit both 6.5" and 8.8" screens. It is completely plug and play and very easy to install. All installation is done behind the HU making it very easy and quick to install.

	CAM-AR1-AD
Built-In	---
Video Inputs	1RGB+2AV+1CAM
Reverse Camera	Yes (with guidelines and Parking sensors)
Functions	Add external video sources and Reverse Camera
Parts	Interface Box
	Power CAN Harness
	Video RCA Cable

	External Switch Button

Interface can be used to add external high definition 360 surround view (2D or 3D) from high definition RGB port. User can also add 2 video sources from CVBS like DVD, Digital TV, Phone mirroring etc. User may also add reverse camera with active guidelines and show with OE parking sensors. The Reverse Camera is automatically triggered when engaging the reverse gear of the car.

Alfa Romeo Connect 6.5" and UConnect 8.8" 3D Nav systems

. Switching Modes:

Switch between different inserted video modes. Switching will be from OE screen to Built-in Module/RGB to Video1(if selected) to Video2(if selected) back to OE Screen.



Switching:

Switching can be done using 3 different methods:

- a) Hold "Menu" button on the system for 3 seconds to switch between modes.
- b) Pressing any source buttons on the system will switch back to OE screen.
- c) Use external switch button to switch between modes.

Knob Control:

When adding external navigation, Android or DualLink(Carplay/Android Auto) user may use OE Knob to control the functions. As the vehicle is without OE touch screen.

In Android user may also use external touchpad/mouse to control from USB port. It can be make controlling functions much easier.



Switch between OE screen and added Navigation, Android, DualLink, Video 1, Video2 using external switch button

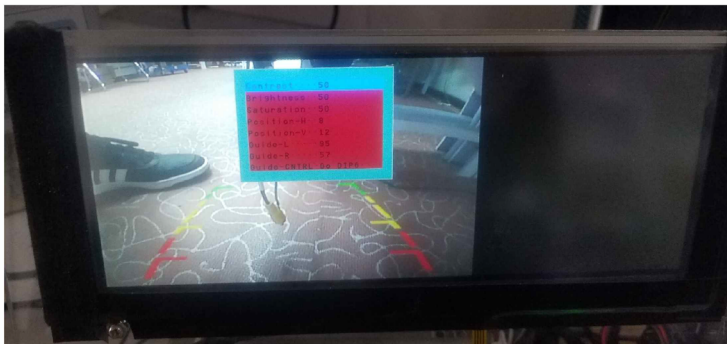


Switch using the "MENU" key. Switch back to OE using any button. It will automatically go back to OE screen.

Interface OSD Options:



- Once installation is complete of the interface use the 3 OSD buttons to adjust the screen size for inserted video inputs.
- Each video input needs to be adjusted separately as settings are saved independently.
- Press "Menu" to open OSD menu. Use "Up" and "Down" to scroll.
- "Menu" to select option and "Up" and "Down" to adjust



**NOTE: When adjusting reverse picture keep reverse gear engaged and for guidelines/parking sensor move the steering wheel for changes to be seen.*

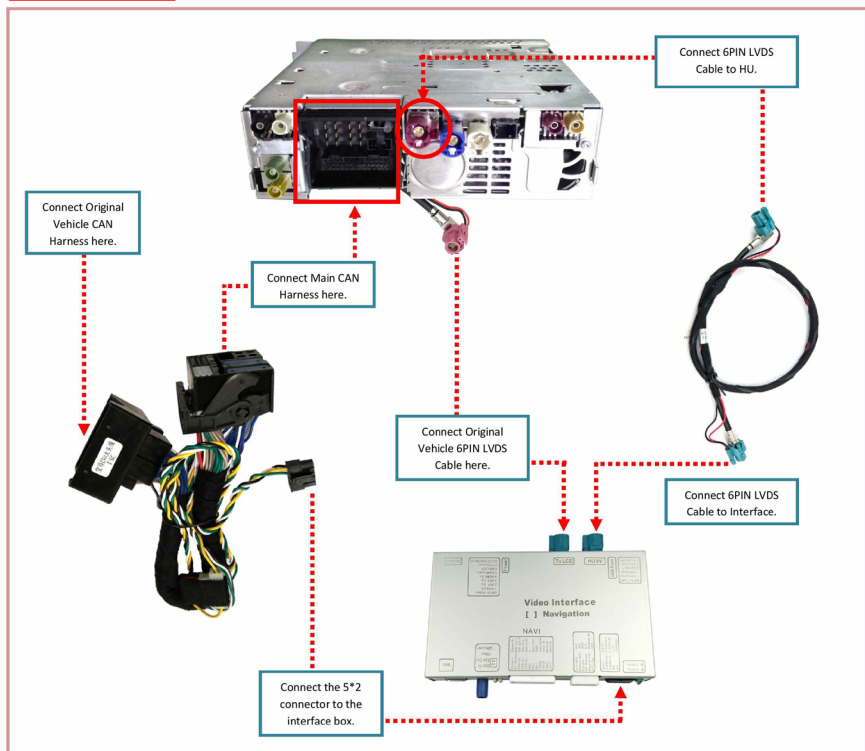
Installation:

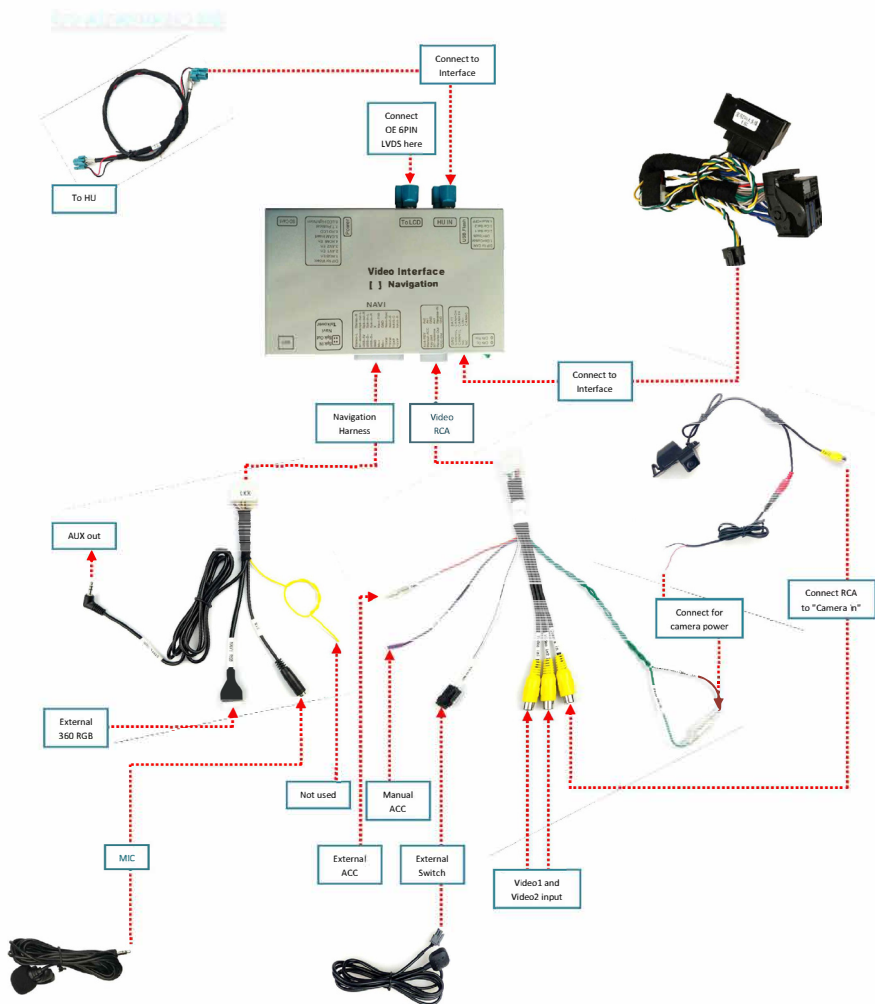
Installation of this interface is very easy as it is completely plug and play. There is no need to open the radio to insert any PCB etc.

All installation is done behind the **Head Unit**.


- Each model may have a different process to gain access to the Head Unit. (Please check the Car manufacturers manuals to know how to open the dashboard and access the panels).
- Once the back panel of the Head Unit is accessed, it will have two cables to remove. One is the power harness and the other will be the 6Pin Round LVDS cable.
- The 6Pin Round LVDS cable from the interface should be inserted here and the OE 6PIN Round LVDS cable removed should be plugged into the Interface (Rerouting of the Video will be complete).
- The OE Power Harness will be removed from the port and inserted to the Power Harness provided with the interface. The Power harness plug provided with the interface will be inserted in the place the original plug was removed.

Connection for System:






Interface DIP Settings:

DIP Down= ON DIP UP= OFF			
			
DIP	ON	OFF	Default
1	External RGB installed (Not Used for CAM Interface)	Video 1 <u>not</u> installed (Not Used for CAM Interface)	UP(OFF)
2	Video 1 installed	Video 1 <u>not</u> installed	UP(OFF)
3	Video 2 installed	Video 2 <u>not</u> installed	UP(OFF)
4, 5	DIP4: DOWN(ON) DIP5: DOWN(ON)	VGA (RGB 360) video when reverse gear activated	This 2 DIPs sets the reverse video option, when the Green wire goes to 12V, one video will be displayed.
	DIP4: UP(OFF) DIP5: DOWN(ON)	Aftermarket CVBS video when reverse gear activated	
	DIP4: UP(OFF) DIP5: UP(OFF)	OEM Reverse video when reverse gear activated	
	DIP4: UP(OFF) DIP5: UP(OFF)	OEM Reverse video when reverse gear activated	
6	Guidelines ON	Guidelines OFF	DOWN(ON)
7, 8	DIP7: UP(OFF) DIP8: DOWN(ON)	6.5" System	DIP7: DOWN(ON) DIP8: UP(OFF)
	DIP7: DOWN(ON) DIP8: UP(OFF)	8.8" System	

CAN DIP Settings:

DIP Down= ON DIP UP= OFF			
			
DIP	ON	OFF	Default
1	OE KNOB Control Used (Not Used for CAM Interface)	OE KNOB Control <u>not</u> used (Not Used for CAM Interface)	DOWN(ON)
2	For ALFA ROMEO (Keep ON as Default)	For Other Models (Keep ON as Default)	DOWN(ON)
3	Not Used	Not Used	UP(OFF)
4	Not Used	Not Used	UP(OFF)

**NOTE: When adjusting CAN Dip settings, Please check the options. Once changing these dip settings disconnect power and restart for settings to go into effect.*

No.	Name	Parameter
1	Video Input amplitude	0.7Vpp with 75 ohm impedance NTSC/PAL/SECAM automatic switch
2	Synchronous signal strength	3~5VPP with 5K impedance, synchronization should be negative pulse
2	Reverse Control wire	>5V will force into camera mode.
4	Standby current	< 10uA
5	Video Format	NTSC/PAL/SECAM
7	Normal power consumption	4.8W [0.4A @12V]
8	VGA resolution	HD (800X480 or VGA (640X480)
9	Reverse trigger threshold	>5V trigger
10	Work temperature	-40°C to +85°C
11	Dimensions	-