

Onboard Entertainment System (OES)

1. short description CID-Interface V4.2:

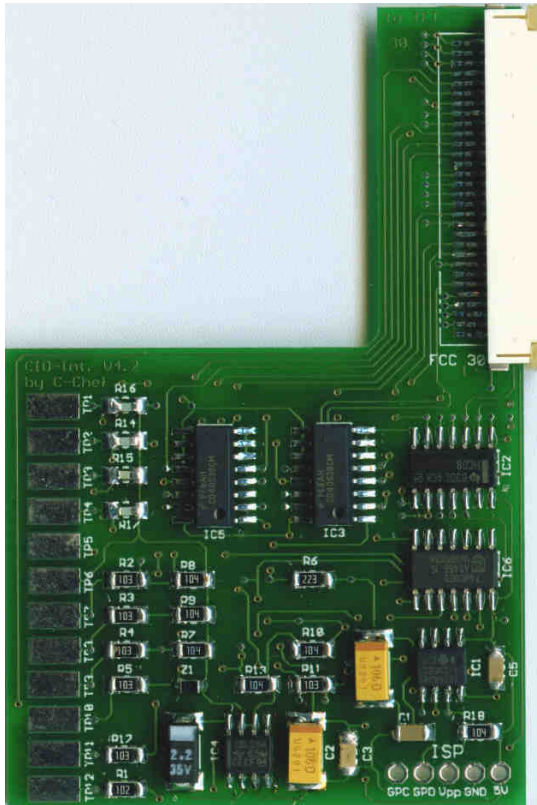


fig 1: CID-Interface V4.2

The CID-Interface allows displaying external video signals e.g. those from DVB-T receivers, DVD-players, Laptops or reverse cameras through the original Opel-Colour Info Display (CID) used in the Astra-H models.

For installation, the CID must be removed from the car and opened in order to merge the CID-Interface into a 30-pole flat ribbon wire which is connected to the actual TFT-display.

Due to the fact that the CID can display RGB-signals **only**, the use of a RGB-converter may be required to connect the desired video source (see options).

The connection of the CID-Interface is done with a shielded multipole round cable that ends in a 15-pole SubD male connector.

Via this cable the RGB-video signals as well as some control signals are transmitted.

Customised adapter cables that connect a video source (e.g. via SCART-connector) directly to the SubD-male connector of the CID-Interface are available (see figure 2).

They do include also the power supply and audio connections for all devices.

The CID-Interface is compatible at least with the CID-hardware releases HWD3 and HWD3T (see installation manual for more details).

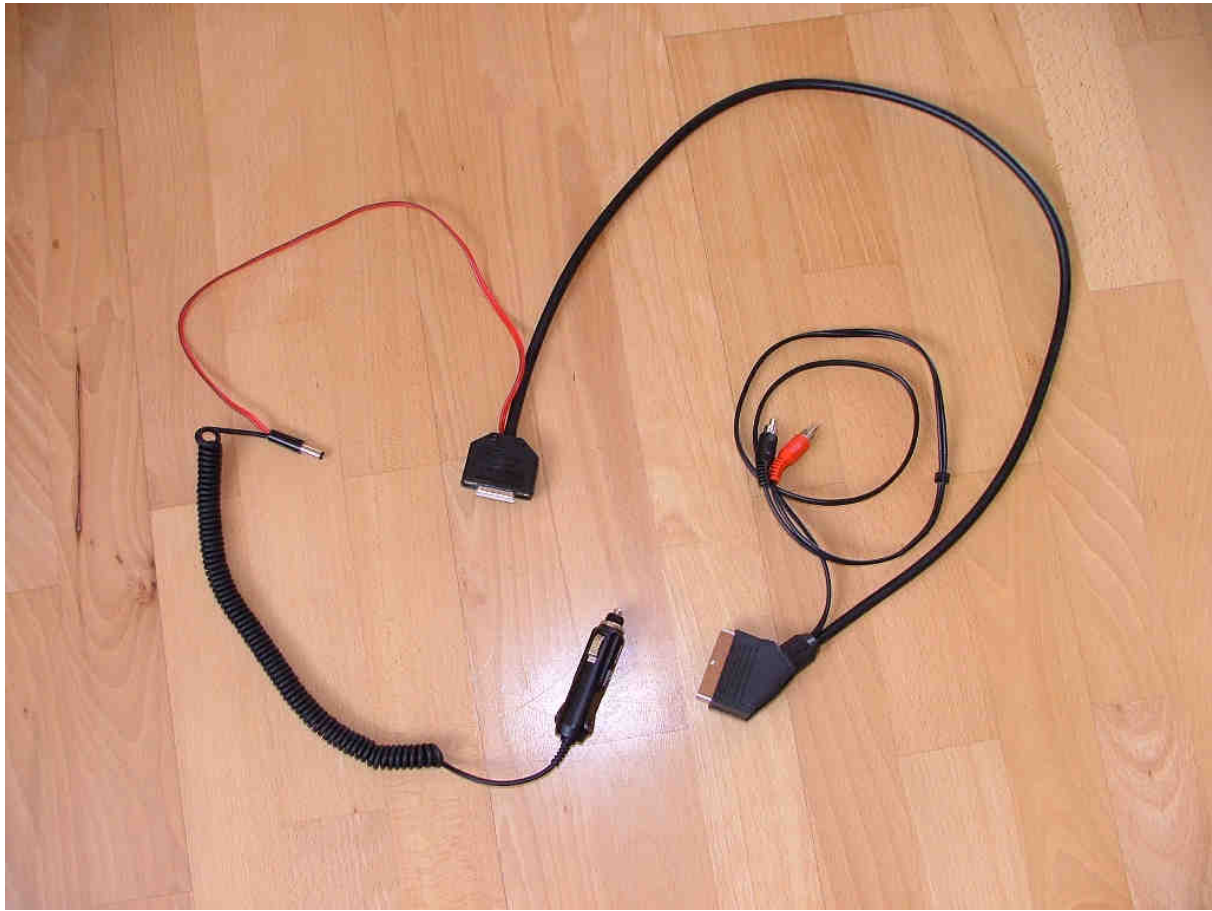


Fig. 2: adapter cable to connect a video source with SCART-connector to the CID-Interface



Fig. 3: adapter cable to connect a DVB-T-receiver to the car's roof antenna (cellphone preparation or DAB)

2. price list OES-Base kit:

- **CID-Interface V4.2:** fully assembled and soldered (see fig.1), with approx. 1 m wire length and 15-pole SubD-male connector **80,-€**
- **Specific adapter wire:** 15-pole SubD female connector to RGB-video source, 12V-power socket connector for supplying all used devices **25,-€**
- **FM-modulator:** for feeding the video source's audio signals (stereo) into the car radio (frequency e.g. 88.5 MHz). The audio feeding is done via radio frequency, there is no need to cut the radio antenna cable!
30,-€

total OES-Base kit: 135,-€

further options:

- **FBAS to RGB-converter (new type!!):** to connect a video source with a FBAS(composite)-video output (yellow chinch connector). Including a cable set with integrated 8V-power supply. Many car-DVD-players are only equipped with this FBAS-video output. **140,-€**
- **VGA to RGB-converter:** to connect a video source with VGA-output (PC-monitor connector), e.g. better car-DVD-players, laptop computers or Car-PCs (max. supported resolution: 1280x1024). Including a cable set with integrated 5V-power supply. **75,-€**
- **DVB-T antenna adapter cable:** to connect the car's roof antenna (DAB or cellphone preparation, not radio!) to a DVB-T-receiver (see figure 3) **25,-€**
- **DVB-T antenna amplifier 30dB:** to improve the DVB-T-reception using the car's roof antenna, including a cable set with 12V-power supply **45,-€**

If connecting a video device with RGB-video output such as SCART-connector, no converter is necessary (e.g. Technisat Digipal 1 or Technotrend DVB-T receiver)!

The components of the OES-Base kit can be ordered also separately. The delivery costs depend on the configuration (package size) and will be charged separately.

Upgraders from CID-Interface V3.x to V4.2 can still use their 30-pole jumper cable and the shielded round multipole cable with the SubD-connector which lowers the price for the fully mounted CID-Interface V4.2 circuit board to 55,-€.

3. improvements to the CID-Interface V3.x:

- no visible horizontal lines any more if the CID is dimmed. The dimming is no longer partially suppressed and is equal the cars current dimming settings.
- no mechanical “clicking”-noises any more when changing to external video and back due to omitted relays -> no mechanical wear
- **“Soft-Switching”-function:** when switching to external video and back, the CID’s brightness is gently reduced to zero. Then the switching of the video source occurs and afterwards the brightness is increased again gently to the desired value. Due to this function, there is no visible flickering of the CID when switching to external video and back.
- when switched to external video, the CID’s brightness can be reduced to a desired value for better adaptation in darkness. This function can also be used to gently reduce the brightness to zero and gently increase again when switching between various external video sources (see Soft-Switching function).