

# Onboard Entertainment System (OES)

## 1. short description CID-Interface:

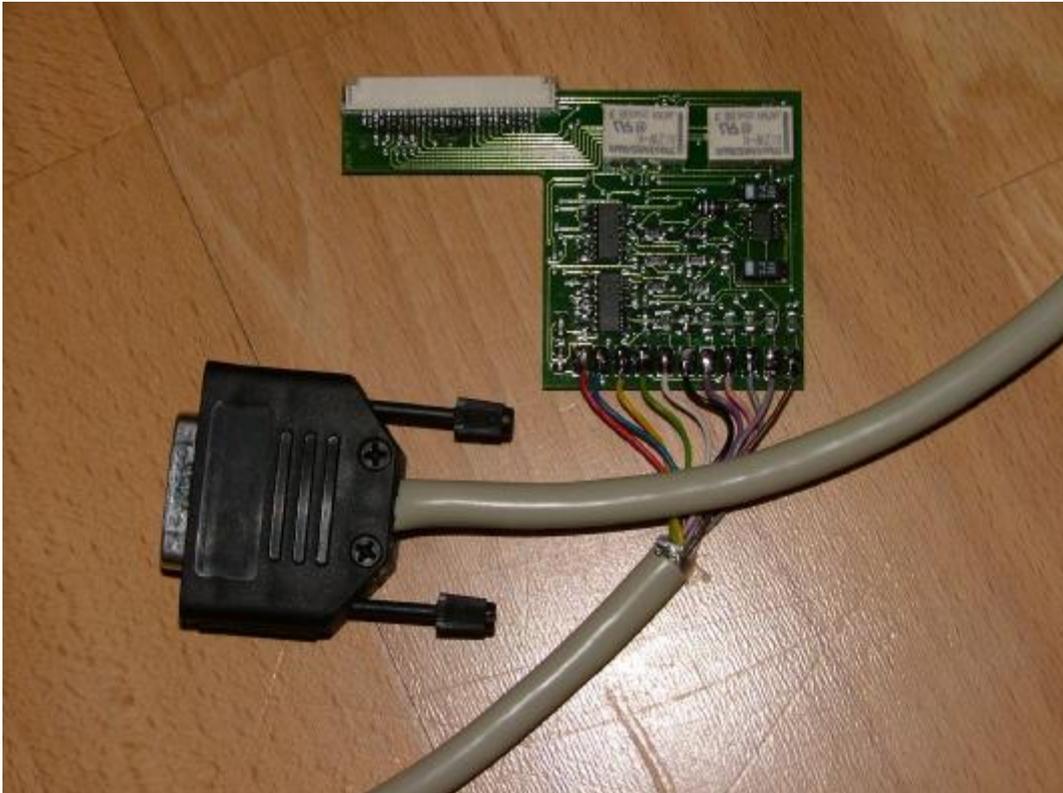


figure 1: CID-Interface with wire and SubD-15 pole connector.

The CID-Interface has to be integrated into the Color Info Display (CID) of an e.g. Opel Astra-H and allows playback of an external RGB-video source.

The CID must be taken out of the car, opened and the connection with a flexible 30-pole flat ribbon wire inside the CID to connect the controller board with the TFT-board must be interrupted. The above shown CID-Interface must then be merged between the TFT-board and the controller board of the CID in order to switch between internal (EHU) and external video source. The connection of the CID-Interface is done by a shielded multipole round wire ending into a 15-pole SubD male connector. Via this wire the RGB-video signals as well as the control signals from the OES-Controller are transmitted.

It is possible to operate the CID-Interface completely without the OES-Controller with a reduced functionality (only switching between internal and external video).

For that purpose a special adapter wire (SubD-15 female to SCART male) is available that allows a direct connection between the CID-Interface and an external video source with a SCART-connector. This adapter wire has the following features:

- 15-pole SubD female connector (CID-Interface) to SCART-male connector
- audio signals right/left carried out to cinch connectors (for FM-Modulator)
- as power source for the CID-Interface, the switched 12V of the SCART-connector are used (automatic switching to external video when video source is turned on)
- external video format hardwired to 16x9

## 2. price list CID-Interface:

Ø **CID-Interface**, fully assembled and soldered (as shown in fig.1), with approx. 1 m wire length and 15-pole SubD male connector

**70,-€**

optional:

Ø **Adapter wire** 15-pole SubD female to SCART-connector for direct connection with a video source (e.g. DVB-T receiver Technisat Digipal I)

**15,-€**

Ø **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 with radio frequency, it is not necessary to split the radio antenna wire!

**30,-€**

Ø **12V-car adapter** with a fuse and several DC-connectors to deliver power to the external video source and FM-Modulator

**10,-€**

**total OES-base kit: 125,-€**

delivery costs are not included!

### 3. comments:

With the OES base kit it is possible to connect one video source (e.g. DVB-T receiver) with the Color Info Display. If usage of more than one video sources is desired, the OES complete kit (with OES controller) is required or the SCART-connector must be plugged into the other video source manually.

The video source should have a 12VDC power supply (or less), otherwise a DC to AC converter may be necessary.

If the video source does not have a RGB-output (SCART) but FBAS-output (yellow cinch connector) only, a FBAS to RGB-converter is needed because the CID can only display RGB-signals.

The components of the OES base kit can be ordered also separately. If requested, the bill of material with ordering numbers of all components and the CAD file (Eagle 4.11 BRD-file) can be obtained for free via email.

Together with the OES base kit, an installation manual with pictures will be provided. If anybody is too scared of installing the OES base kit by himself, I can do the installation into the car at your own risk for 10,-€ per hour (approx. 4 hours needed for the base kit).

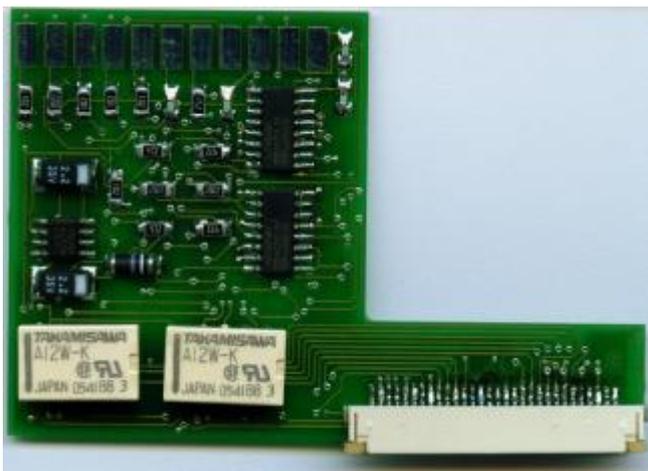


figure 2: CID-Interface top side

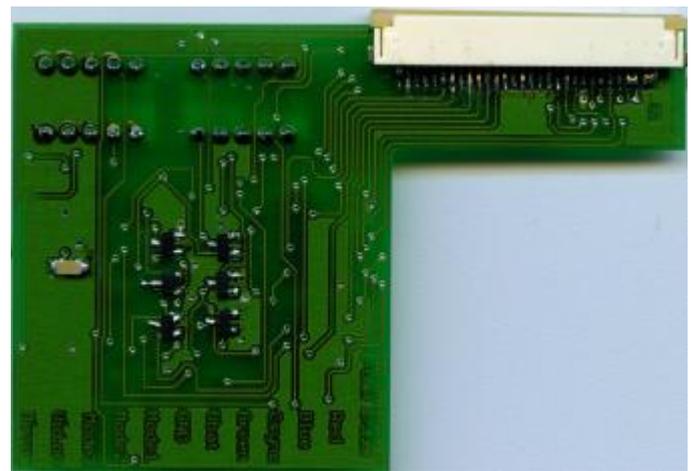


figure 3: CID-Interface bottom side