c.LOGiC-Interface

C2-MFD3

Compatible with navigation systems
Volkswagen RNS510, RNS810
Skoda Columbus
Seat Trinax

Only for vehicles WITHOUT factory rear-view camera

Product features

- full plug and play multimedia interface
- 2 AV-inputs with separate IR-control channel
- control of after-market devices, e.g. DVB-T tuner, DVD-player, DVD-changer, ...
- after-market rear-view camera input
- automatic switching to rear-view camera input (only from interface mode)
- rear-view camera power (+12V max 1A)
- Rear-seat-entertainment video-output for Video-sources connected to the c.LOGiC
- power on remote out trigger signal (+12V max 1A) to switch on connected devices
- video-in-motion
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Legal Information

By law, watching moving pictures while driving is prohibited, the driver must not be distracted. We do not accept any liability for material damage or personal injury resulting, directly or indirectly, from installation or operation of this product. This product should only be used while standing or to display fixed menus or rear-view-camera video when the vehicle is moving, for example the MP3 menu for DVD upgrades.

Changes/updates of the vehicle’s software can cause malfunctions of the interface. We offer free software-updates for our interfaces for one year after purchase. To receive a free update, the interface must be sent in at own cost. Labor cost for and other expenses involved with the software-updates will not be refunded.

1. Prior to installation

Read the manual prior to installation. Technical knowledge is necessary for installation. The place of installation must be free of moisture and away from heat sources.

1.1. Delivery contents

Take down the SW-version and HW-version of the interface boxes, and store this manual for support purposes.

<table>
<thead>
<tr>
<th>CAN-box</th>
<th>TV-403/500</th>
<th>HW_____</th>
<th>SW_____</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interface-box</td>
<td>C2C-M203</td>
<td>HW_____</td>
<td>SW_____</td>
</tr>
</tbody>
</table>

If remote function for the connected devices shall be used, additional an IR-remote cable and Y-adapter are needed, see chapter AV-source(s).
1.2. Check compatibility of vehicle and accessories

Requirements

**Vehicle**
Volkswagen, Skoda and Seat

**Navigation**
RNS510, Columbus and Trinax (all with min. Version B with SW 1100) and RNS810 navigation systems

Limitations

**Factory-TV-tuner**
Must NOT be installed.

**After-market rear-view camera**
Only compatible with NTSC-cameras. Automatic switching to camera from OEM mode only works after coding the head-unit to rear-view camera per diagnosis computer or our optional available OBD-coder OBD-VW-R-xx (OPS, too).

**OPS**
On vehicles with OPS (optical parking system) the OPS control box must be coded to rear-view camera per diagnosis computer if an after-market rear-view camera should be installed.

1.3. Setting the dip switches of the CAN-box TV-403/500

**TV-403**

All vehicles dip 1 ON, dip 2 OFF, dip 3 OFF

**TV-500**

<table>
<thead>
<tr>
<th>Vehicle/ navigation</th>
<th>Dip 1</th>
<th>Dip 2</th>
<th>Dip 3</th>
<th>Dip 4</th>
<th>Dip 5</th>
<th>Dip 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>All vehicles</td>
<td>ON</td>
<td>OFF</td>
<td>OFF</td>
<td>OFF</td>
<td>OFF</td>
<td>OFF</td>
</tr>
</tbody>
</table>

**Note:** Dip switch functions of the TV-500
Dip 1 – activation TV-free
Dip 2 – no function
Dip 3 – no function
Dip 4 – no function
Dip 5 – CAN-bus termination resistor on the vehicle side
Dip 6 – CAN-bus termination resistor on the head-unit side
1.4. Setting the dip switches of the Interface-box C2C-M203

The default dip switch settings of the Interface-box need to be changed ONLY if an after-market rear-view camera shall be connected or if the AV2 of the c.LOGiC shall be deactivated. The dip switches are located inside the Interface-box. For changes it is necessary to open the box. Default settings are:

dip1 = ON, dip2 = OFF, dip3 = OFF

Note: Instead of dip switches, there might be jumper 1 to 3.

1.4.1. Automatic switching to rear-view camera

If an after-market rear-view camera shall be connected, in order for the c.LOGiC to automatically switch to its camera input on engaged reverse gear, set dip2 = ON (up).

Note: With after-market cameras, automatic switching works only from c.LOGiC mode. For automatic switching from OEM modes, it is necessary to code the head-unit to rear-view camera per diagnosis computer or our optional available OBD-coder OBD-MFD3-R-xx (Only possible on RNS510/Columbus/Trinax Version B with minimum software 1100).

If coding is done by diagnosis PC, code rear-view camera to "LOW" in controller 56 radio (not in controller 19 - CAN gateway). After coding the vehicles needs to be locked to reach sleep mode (30 seconds up to 66 minutes depending on vehicle).

Vehicles with OPS (optical parking system): If coding is done by diagnosis PC, code to rear-view camera in controller 10 park assistant 2 (not in controller 19 - CAN gateway). After coding the vehicles needs to be locked to reach sleep mode (30 seconds up to 66 minutes depending on vehicle).

1.4.2. Deactivating c.LOGiC AV2-input

If only one AV-source shall be connected to the c.LOGiC, we recommend to disable the AV2-input, to avoid customers switching by mistake to black/no picture of the AV2-input. In order to disable the AV2-input of the c.LOGiC, set dip1 = OFF (down).
2. Connection schema

[Diagram showing connection schema with labels for AV-source 1, AV-source 2, Rear-seat-entertainment, Interface-box C2C-M203 Front, Interface-box C2C-M203 Rear, CAN-box TV-403/500, Quadlock female of vehicle harness, Harness C3C-VW03, Quadlock male on rear side of head-unit, and Rear-view camera (optional).]
3. Installation

Switch off ignition and disconnect the vehicle’s battery! If according to factory rules disconnecting the battery has to be avoided, it is usually sufficient to put the vehicle in sleep-mode. In case the sleep-mode does not show success, disconnect the battery with a resistor lead.

Place of installation is behind the head-unit.

3.1. Interconnecting Interface-box, CAN-box and harness

1. Plug harness C3C-VW03 into 8pin Molex of CAN-box TV-403/500.

2. Plug harness C3C-VW03 into 14pin Molex of Interface-box C2C-M203.

3. Plug female 18pin AMP-connector of C3C-VW03 into male 18pin AMP-socket of Interface-box C2C-M203.
3.2. Connections to head-unit

Remove the head-unit from the dash-board.

1. Transfer female Quadlock connector from the back of the head-unit to male Quadlock connector of harness C3C-VW03.

2. Plug female Quadlock connector of C3C-VW03 into male Quadlock socket of head-unit.

3. Plug female 26pin AMP-connector of C3C-VW03 into male 26pin AMP-socket of head-unit.

Note: If the 26pin AMP-socket of the head-unit is already occupied, the vehicle probably has a factory rear-view camera or a factory TV-tuner. In case of a factory tuner, it must be uninstalled: disconnect the female 26pin AMP-connector of the factory harness and disconnect all wires from the factory TV-tuner. In case of a factory rear-view camera you have ordered/received the wrong product, call for support.

3.3. Connecting peripheral devices

It is possible to connect up to 2 after-market AV-sources, after-market rear-view camera and rear-seat-entertainment to the c.LOGiC Interface.

Before final installation of the peripheral devices, we recommend to test-run the c.LOGiC functions to detect incompatibility of vehicle, navigation, factory accessories or peripheral devices as soon as possible.
3.3.1. AV-source(s)

The c.LOGiC interface has the possibility to connect and remotely control by navigation buttons up to 2 pre-programmed devices. The device list in the device control table (Appendix A) shows the pre-programmed remote channels and the related IR-remote cables STA-xxx which must be ordered separately for the control of the device.

1. Using the respective STA-xxx IR-control cable, interconnect the blue (yellow) female 3pin AMP connector of harness C3C-VW03 and the IR-port of the AV-source 1 (AV-source 2).


3. The pink ACC-output wire (+12V max 1A) of harness C3C-VW03 can be connected to the ACC-input wires of the connected device to switch it on. It carries +12V when the head-unit is running.
3.3.2. Installing AV-source’s IR-sensor additionally

Additionally to the control via OEM navigation, it is possible to install the original IR-sensor of a connected device. By using the respective Y-adapter (e.g. STA-Y35MM or STA-RJ12) for the IR-Port of the connected device, the controls of navigation AND device’s IR-sensor can be connected and used simultaneously. Installation of the IR-sensor is recommended as the controls via navigation are limited, and not all functions may be covered.

3.3.3. After-market rear-view camera

1. Connect the video RCA of the after-market rear-view camera to female RCA connector R-CAM IN of Interface-box C2C-M203.

2. Connect the green wire of C3C-VW03 to the camera power supply (+12V max. 1A)
   The green wire is high (+12V max. 1A) when reverse gear is engaged.
   
   **Note:** Only compatible with NTSC-cameras.

   Automatic switching on reverse gear from OEM mode to camera input only works after coding the head-unit per diagnosis computer or our optional available OBD-coder OBD-VW-R-xx (OPS, too).

   If coding is done by diagnosis PC, code rear-view camera to "LOW" in controller 56 radio (not in controller 19 - CAN gateway). After coding the vehicles needs to be locked to reach sleep mode (30 seconds up to 66 minutes depending on vehicle).

   **Vehicles with OPS (optical parking system):** If coding is done by diagnosis PC, code to rear-view camera in controller 10 park assistant 2 (not in controller 19 - CAN gateway). After coding the vehicles needs to be locked to reach sleep mode (30 seconds up to 66 minutes depending on vehicle).
3.3.4. After-market rear-seat-entertainment

Using RCA-cables, connect the rear-seat-entertainment to the female RCA-connector VIDEO OUT of Interface-box C2C-M203.

**Note:** As the output is a full output, not shared with the video signal for the navigation system, splitting the video with an RCA Y-cable might give a good enough picture for two rear-seat-entertainment monitors. If not, or if connecting more than two monitors, use a video splitter.

4. Operation

4.1. Activation of the video-in-motion function

The video-in-motion function is activated permanently without disturbing the navigation performance.

4.2. Selecting the c.LOGiC as current AV-source

Push the MEDIA button of the head-unit and then select VIDEO to choose the c.LOGiC as current AV-source.

4.3. Switching between AV1 and AV2

After selecting the c.LOGiC as current AV source, tap on the touch-screen to receive the options menu. Select Senderliste (channel list) to open the remote function menu. Select Switch AV1/AV2 to switch between internal AV1 and AV2.

**Note:** If AV2 is deactivated (see chapter Deactivating c.LOGiC AV2 input), it is not possible to switch to the c.LOGiC’s AV2.
4.4. Assigning device controls

After selecting the c.LOGiC as current AV source, tap on the touch-screen to receive the options menu. Select Extras and then V-text.

Select Seite (page).

Enter “1” for AV1 (“2” for AV2), followed by the device-related IR-code as described in device control table (appendix A).

Confirm with OK.

Note: The IR-control channel AV1 is preset to RC-Code 41 compatible DVB-T tuners and AV2 is preset to RC-Code 09 for the usbLiNK.

If the AV2 is deactivated (see chapter Deactivating c.LOGiC AV2 input), it is not necessary, nor possible to assign device controls.

4.5. Remote functions

Remote functions can be executed by steering-wheel buttons, head-unit buttons and touch-screen.

4.5.1. Previous/next channel/track

To skip to previous or next channel (TV-mode) or track (DVD/USB/iPod®-modes), use the arrow buttons in the upper left corner of the head-unit, the arrow touch-screen buttons or the UP and DOWN buttons of the steering-wheel.
4.5.2. Other remote functions

When AV1 or AV2 mode is activated, enter Senderliste (channel list). The menu which opens offers a range of commands for the active device. The function description equals the remote control buttons of the additional device. On the additional device the writing may vary (e.g. AV instead of Source). Select any button to execute the described function on the active AV-source.

Note: The volume of an optional connected usbLiNK can be regulated by the right knob (possible only in the main menu).

4.5.3. Menu/setup navigation

To navigate through menu or setup options of the AV-sources, it is necessary to see their picture/OSD, which is not possible in the Senderliste (channel list). Instead, after entering menu/setup, select Extras and then V-Text.

Now menu navigation is possible by the arrow buttons in the upper left corner of the head-unit (left/right) and touch-screen:
Arrow up = UP, Arrow down = DOWN
Stopp = back/return/exit
Zoom = OK/Enter
5. Specifications

Operation voltage 10.5 – 14.8V DC
Stand-by power drain <1mA
Operation power drain 240mA
Power consumption 3W
Temperature range -30°C to +80°C
Weight 202g
Measurements (box only) B x H x T 90 x 30 x 105 mm

6. Technical Support

Caraudio-Systems Vertriebs GmbH
manufacturer/distribution
In den Fuchslöchern 3
D-67240 Bobenheim-Roxheim

e-mail support@caraudio-systems.de

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