

## **c.LOGiC-Interface**

### **C4-MQB-H**

**Compatible with various VW MIB systems**

#### **Product features**

- Plug and play multimedia interface
- 2 AV-inputs
- Rear-view camera input
- Front-view camera input
- Optional control over steering wheel buttons of 1 after-market device (e.g. DVB-T tuner)
- 2 trigger outputs (ACC, camera) (+12V max. 1A)
- Automatic switching to rear-view camera input
- USB update-port for software-updates by consumer

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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.

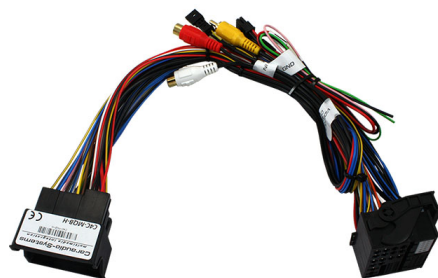
### 1.1. Delivery contents

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

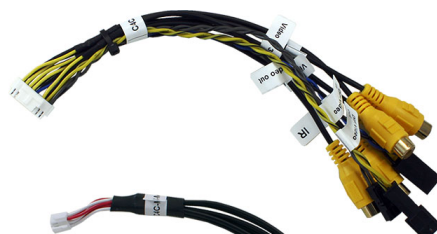
**Interface-box**  
**C4C-M40-ND**  
 HW \_\_\_\_\_ SW \_\_\_\_\_



**Harness**  
**C4C-MQB-H**



**Video harness**  
**C4C-M40-V**



**Audio harness**  
**C4C-M40-A**



## 1.2. Check compatibility of vehicle and accessories

### Requirements

|                   |                                                                                  |
|-------------------|----------------------------------------------------------------------------------|
| <i>Vehicle</i>    | Volkswagen and Skoda vehicles <b>from year 2015</b>                              |
| <i>Navigation</i> | MIB Composition Media / MIB Discover (5,8", 6,5", 8")<br>MIB Amundsen (6,5", 8") |

### Limitations

|                      |                                                                                                           |
|----------------------|-----------------------------------------------------------------------------------------------------------|
| <i>Video-sources</i> | Only compatible to NTSC-sources.                                                                          |
| <i>Factory-PDC</i>   | The factory-PDC picture isn't available by connecting the interface. Acoustic signals are still existing. |

## 1.3. Setting the dip switches of the interface box C4C-M40-ND

Various settings must be made with the dip-switches of the interface box.

Dip position "down" is OFF and position "up" is ON.



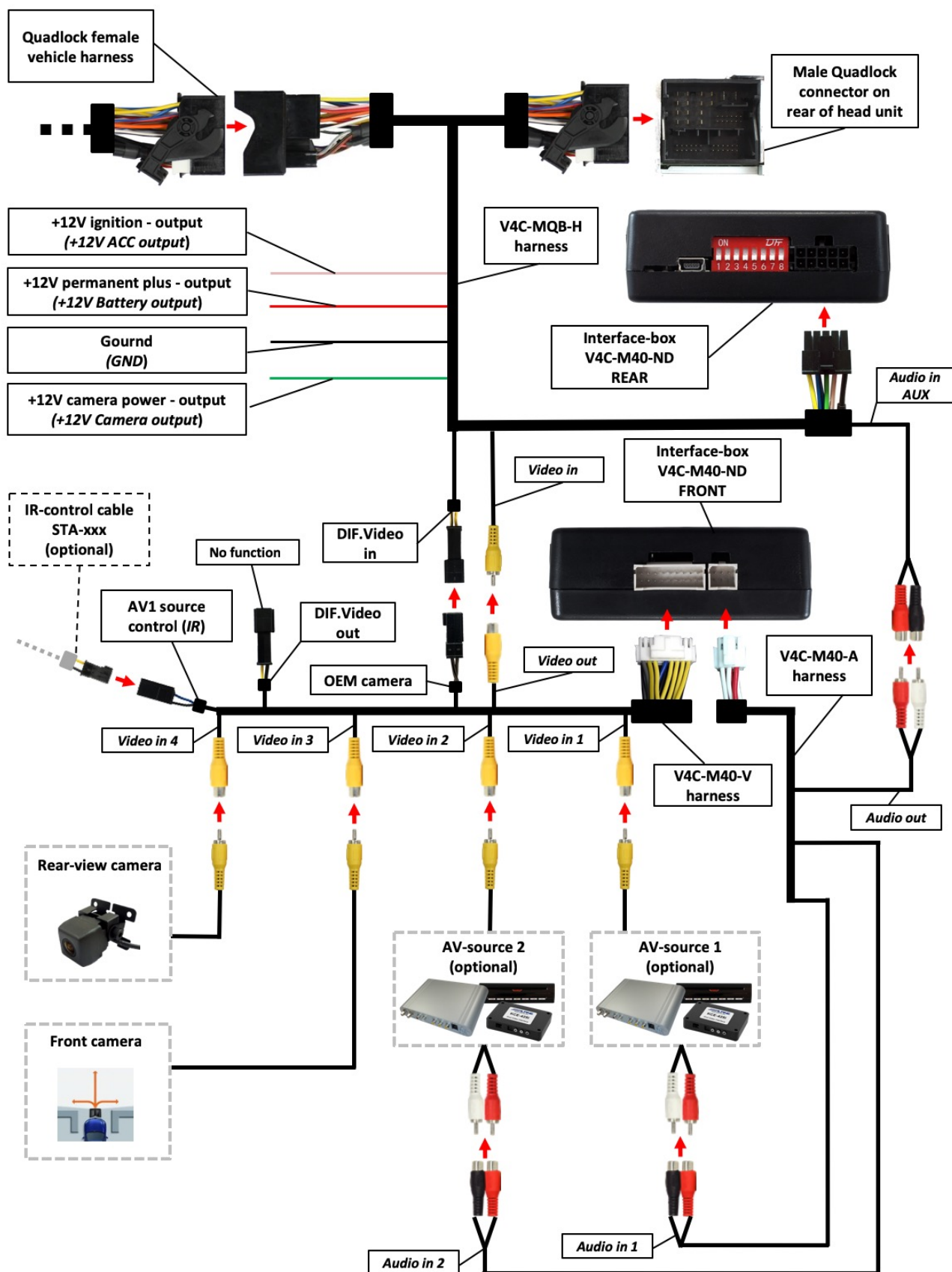
| Dip-switch     | ON                                                | OFF                   |
|----------------|---------------------------------------------------|-----------------------|
| <b>Dip 1</b>   | AV1 - ON                                          | AV1 - OFF             |
| <b>Dip 2</b>   | AV2 - ON                                          | AV2 - OFF             |
| <b>Dip 3</b>   | Front camera - ON                                 | Front camera - OFF    |
| <b>Dip 4</b>   | Interface coding setting (see page 13, point 4.1) |                       |
| <b>Dip 5</b>   | Factory PDC not installed                         | Factory PDC installed |
| <b>Dip 6-7</b> | RC code settings (see page 14, point 4.2)         |                       |
| <b>Dip 8</b>   | CAN bus termination (set to <b>ON</b> )           |                       |

**After each change of the dip switch settings you have to execute a power reset of the c.LOGiC interface-box!**

## 1.4. LED's of the interface box C4C-M40-ND

| LED    | Status  | Funktion            |
|--------|---------|---------------------|
| ● Red  | Lights  | Ignition is ON      |
| ● Blue | Lights  | Camera coded        |
| ● Blue | Flashes | CAN Bus is searched |

## 2. Connection schema

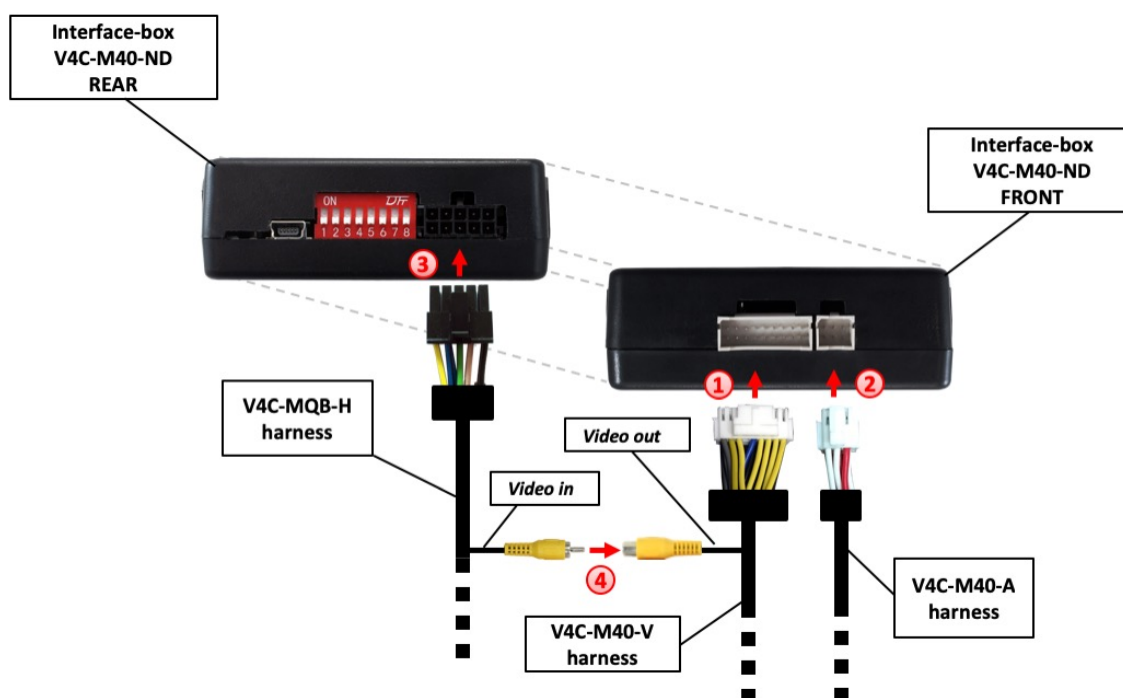


## 3. Installation

**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 on the rear of the head unit.

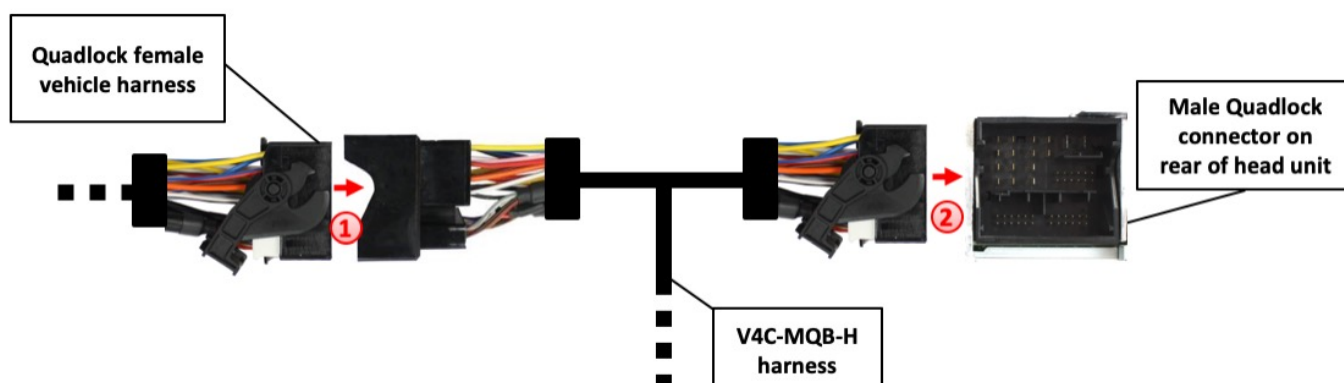
### 3.1. Connecting interface-box and harnesses



- 1 Connect female 18pin connector of harness C4C-M40-V to the male 18pin connector on the front of the interface-box C4C-M40-ND.
- 2 Connect female 6pin Micro-Fit connector of harness C4C-M40-A to the male 6pin connector on the front of the interface-box C4C-M40-ND.
- 3 Connect female 10pin connector of harness C4C-MQB-H to the male 10pin connector on the rear of the interface-box C4C-M40-ND.
- 4 Connect the RCA male connector "Video in" of harness C4C-MQB-H to the RCA female connector "Video out" of harness C4C-M40-V.



## 3.2. Connection to the factory monitor



- 1 Transfer Quadlock connector of vehicle harness from rear of the head unit into male Quadlock connector of harness C4C-MQB-H.
- 2 Plug female Quadlock connector of harness C4C-MQB-H into male Quadlock socket on the rear of the head unit.

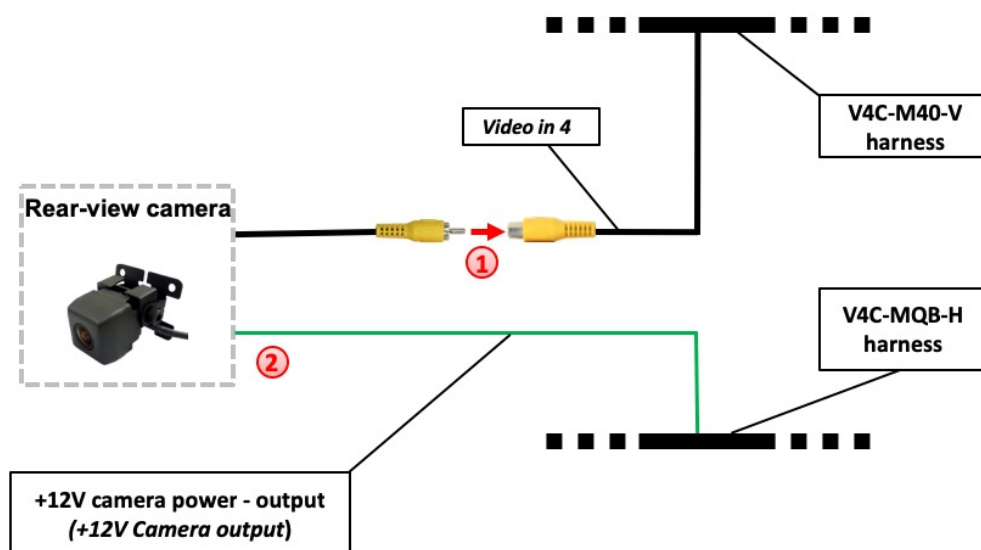
## 3.3. Connecting peripheral devices

It is possible to connect 2 after-market AV-sources, an after market rear view camera and front camera to the interface.

**Before final installation of the peripheral devices, we recommend to test-run the interface functions to detect incompatibility of vehicle, navigation, factory accessories or peripheral devices as soon as possible.**

**Note:** Only compatible to NTSC video-sources.

### 3.3.1. After market rear-view camera

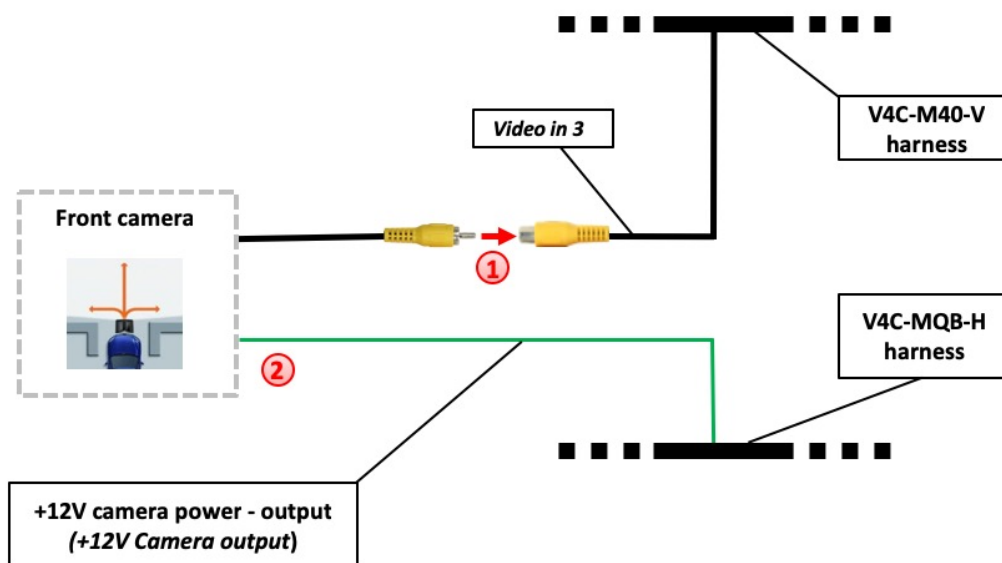


- 1 Connect the video RCA of the after market rear-view camera to the female RCA connector "Video in 4" of harness C4C-M40-V.
- 2 Connect the green wire of harness C4C-MQB-H to the camera power supply (+12V max. 1A). The green wire is high (+12V) when reverse gear is engaged.

**Note:** Only compatible to NTSC-cameras.



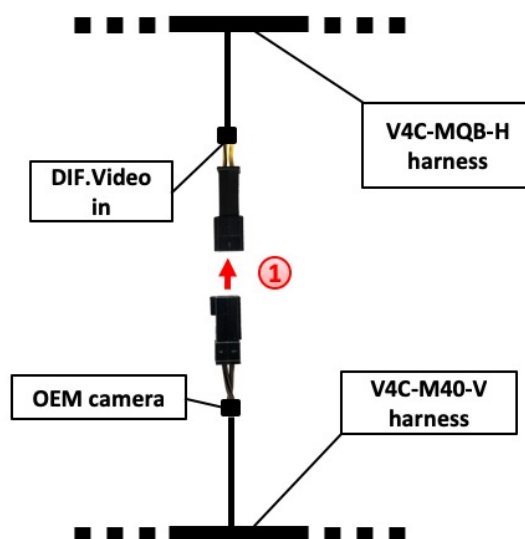
## 3.3.2. After market front camera



- ① Connect the video RCA of the after market front camera to the female RCA connector "Video in 3" of harness C4C-M40-V.
- ② Connect the green wire of harness C4C-MQB-H to the camera power supply (+12V max. 1A). The green wire is high (+12V) when reverse gear is engaged.

**Note:** Only compatible to NTSC-cameras.

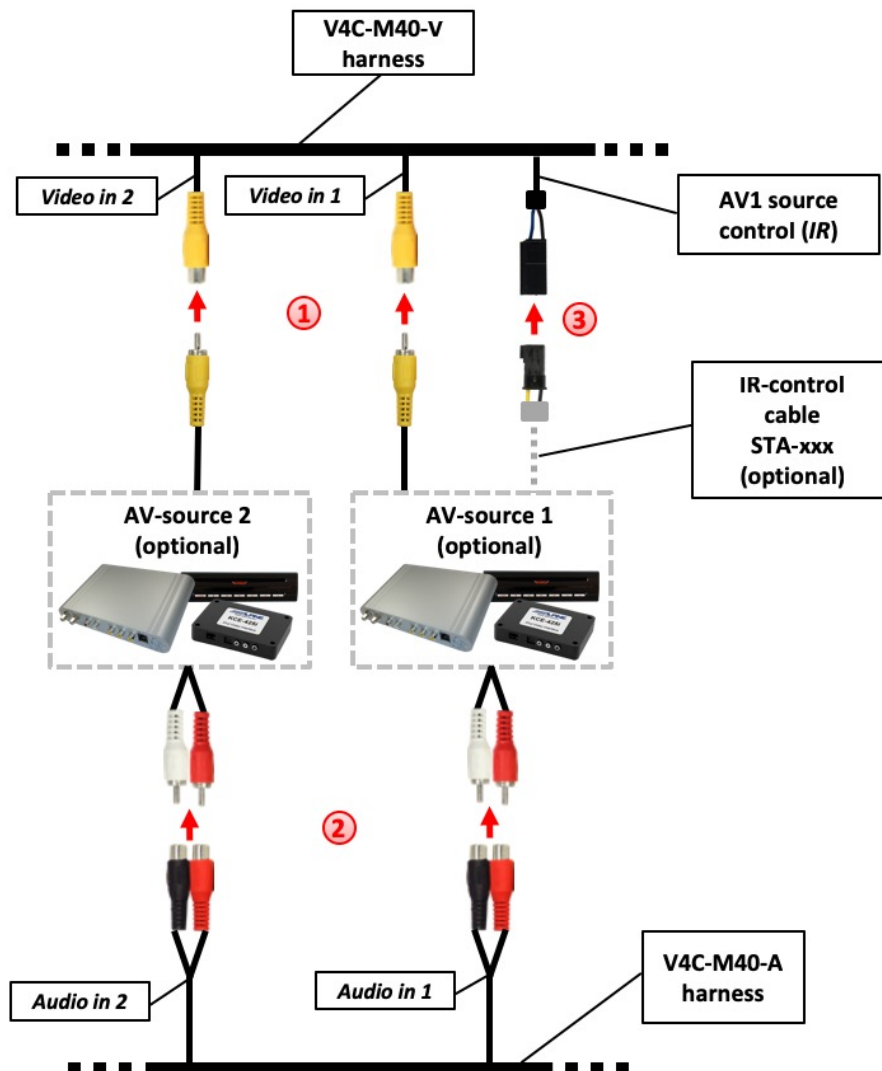
### 3.3.3. Factory rear-view camera



- 1 Connect the "DIF.Video in" 2pin socket of the V4C-MQB-H harness to the 2pin "OEM camera" plug of the V4C-M40-V harness.

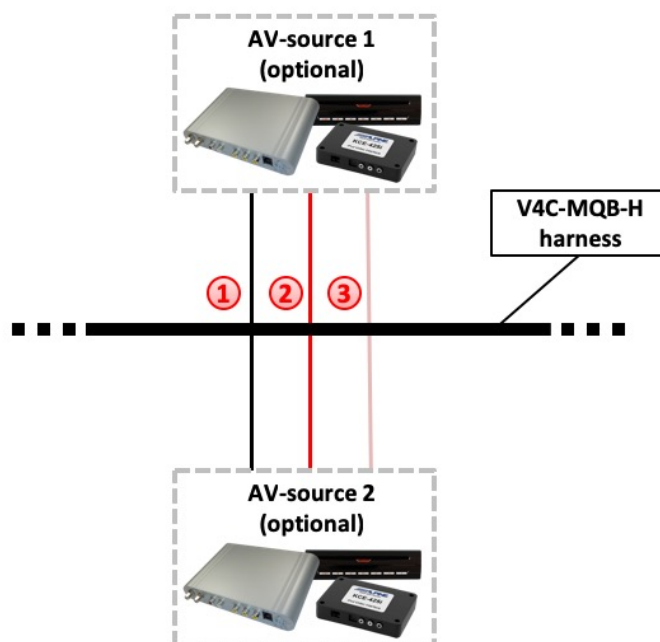
### 3.3.4. AV-source(s) audio/video connection

The interface has the possibility to connect 2 AV-sources. Additionally, the AV1 video source can be controlled via the steering wheel buttons.



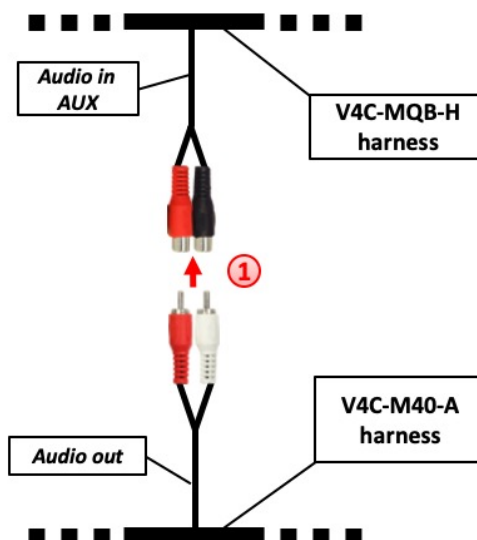
- 1 Connect the video cinch plug of the AV-source 1/2 to the video cinch socket "Video in 1" / "Video in 2" of the V4C-M40-V harness.
- 2 Connect the audio cinch plugs of the AV-source 1/2 to the audio cinch sockets "Video in 1" / "Video in 2" of the V4C-M40-V harness.
- 3 **Optional:** Using the respective STA-xxx IR-control cable (available separately), interconnect the female 3pin AMP connector "IR" of harness V4C-M40-V and the IR-port of the AV-source 1.

## 3.4. AV-source(s) power connection



- 1 Connect the black cable (GND) of the V4C-MQB-H harness to ground of the AV-source 1/2.
- 2 Connect the red cable (+ 12V battery output) of the V4C-MQB-H harness to the + 12V permanent power supply of the AV source 1/2.
- 3 Connect the pink cable (+ 12V ACC output) of the V4C-MQB-H harness to the + 12V ACC power input of the AV source 1/2.

## 3.5. Connection to the factory AUX-input



- 1 Connect the audio cinch sockets „Audio in AUX“ of the V4C-MQB-H harness to the audio cinch plugs „Audio out“ of the V4C-M40-A harness.

## 4. Activation

**Note:** With existing factory rear-view camera do not the following activation procedure!

1. Set DIP switch "5" to OFF if original PDC system is available.
2. Switch on the ignition and wait until the MIB system has started.
3. Press the "phone button" on the steering wheel for 10 seconds.
4. The red and blue LEDs are flashing (coding in progress).
5. After successful coding, the MIB system make a restarted.  
(In some cases, the MIB system don't make a automatic restart.  
In this case, the quadlock plug of the MIB system must be disconnected briefly)
6. Activation is completed.



### 4.1. Function test

#### After-Market rear view camera:

Switch on the ignition, insert reverse gear and check if the image of the after-market rear view camera is visible. If no camera image is visible, then switch off the ignition, disconnect the 10pin connector from the interface box C4C-M40-ND, set the DIP switch "4" to ON and reconnect the 10pin connector to the interface box C4C-M40-ND.





#### AV-source(s):

Switch on the ignition and activate manually the AV level of the interface (see page 14, point 5.1). If no video image is visible or if the vehicle PDC graphic is over the video image, then switch off the ignition, disconnect the 10pin connector from the interface box C4C-M40-ND, set the DIP switch "4" to ON and reconnect the 10pin connector to the interface box C4C-M40-ND.



## 4.2. Settings for video device control

The interface has the function to control the following video sources on the AV-1 input via the steering wheel buttons. To do this, the video source to be controlled must be set via DIP switches 6 and 7.

|                                                                                   |                                                                                                          |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
|  | usbLiNK2, usbLiNK3                                                                                       |
|  | dvbLink51, DVB-T80, Ampire DVB-T400, DVB-200, DVBT450                                                    |
|  | Ampire DVBT-50 / DVBT-51 / DVBT-52                                                                       |
|  | DVD USB, MP410, AD212U, DVP-1000M, DVP-900HD, Ampire DVX100/101/102/103/200i, Ampire DVX50, MP23, BRX100 |

## 5. Operation

### 5.1. Selecting the interface as current AV-source

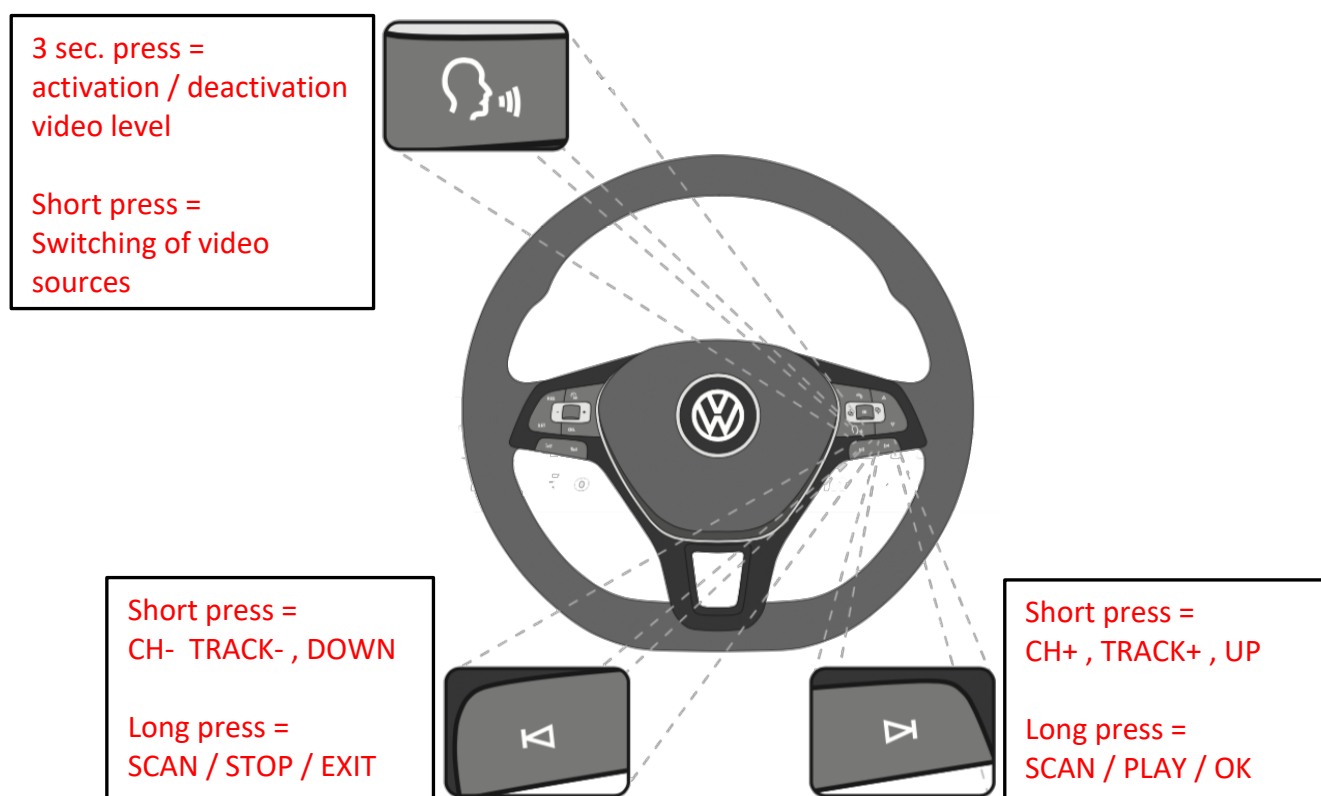
To select the interface as the current video source, first the radio AUX level has to be activated (for camera view, this step is not necessary).

After activating the AUX level, press the "Voice" button for 3 seconds to select the interface as the current video source.

Press the **"Voice" button briefly** to switch the video sources. Each short press changes to the next video input. Deactivated video inputs are skipped.

Press the **"Voice" button** again for **3 seconds** to deactivate the interface as the current video source.

**Note:** Manual activation of the original rear view camera image is not possible.




### 5.2. Control of the AV-sources (DVB-T / DVD)

The AV source connected to the AV-1 input can be controlled via the **"TRACK"** forward / backward steering wheel buttons. The graphic shows which functions of the AV source can be executed via short and long key press (about 2 seconds) on the corresponding steering wheel button.

## 6. Specifications

|                                   |                 |
|-----------------------------------|-----------------|
| Operation voltage                 | 10.5 – 14.8V DC |
| Stand-by power drain              | <2mA            |
| Operation power drain             | ~60mA           |
| Power consumption                 | ~0.08W          |
| Temperature range                 | -30°C to +80°C  |
| Weight                            | 44g             |
| Measurements (box only) B x H x T | 76 x 27 x 54 mm |

CE  12V DC

## 7. Technical Support

**Caraudio-Systems Vertriebs GmbH**  
***manufacturer/distribution***

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