

Camera interface

RL-MFD3

**Rear-view camera-input
compatible with navigation systems
Volkswagen RNS510, RNS315,
RNS810 and radio RCD510
Skoda Columbus and radio Bolero
Seat Trinax**

Only for vehicles WITHOUT factory rear-view camera

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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
RLC-M02
HW _____ SW _____



Harness
RLC-VN03

1.2. Check compatibility of vehicle and accessories

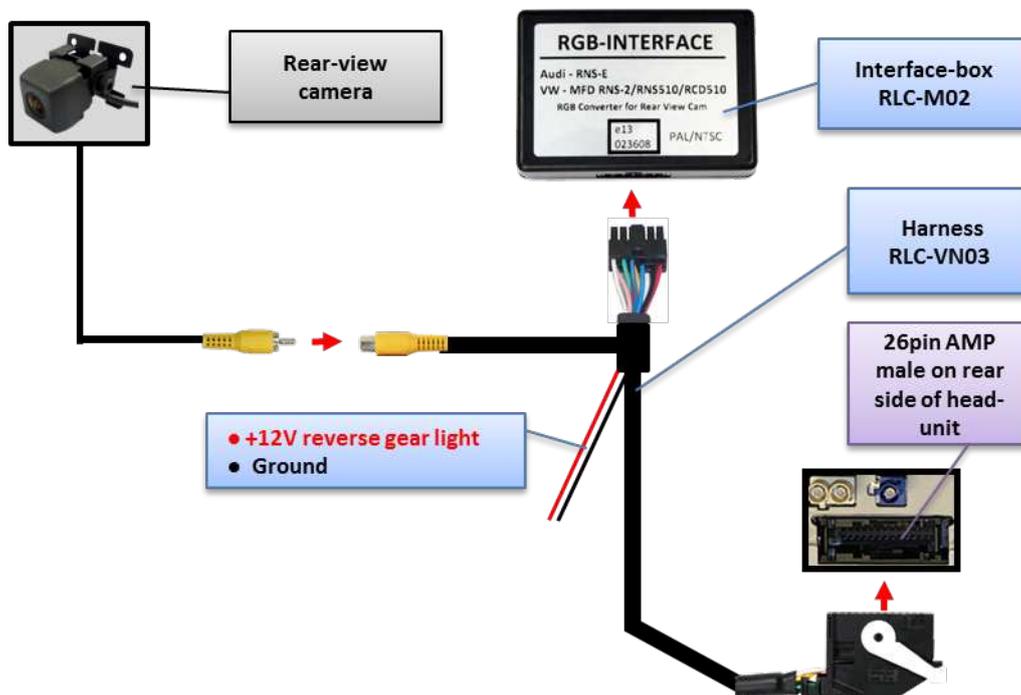
Requirements

<i>Vehicle</i>	Volkswagen, Skoda und Seat
<i>Navigation</i>	RNS510, Columbus and Trinax (all with min. Version B with SW 1100), RNS315 and RNS810 navigation systems RCD510 and Bolero radio WITH 26pin connector on the rear of the head-unit

Limitations

<i>Factory-TV-tuner</i>	Must NOT be installed.
<i>Coding</i>	The head-unit must be coded to rear-view camera per diagnosis computer or the RNS510, RNS315 and the RCD510 with our optional available OBD-coders OBD-VW-R-xx (OPS, too).
<i>OPS</i>	On vehicles with OPS (optical parking system) the OPS control box must be coded to rear-view camera per diagnosis computer.
<i>After-market rear-view camera</i>	Only compatible with NTSC-cameras.

2. Connection schema

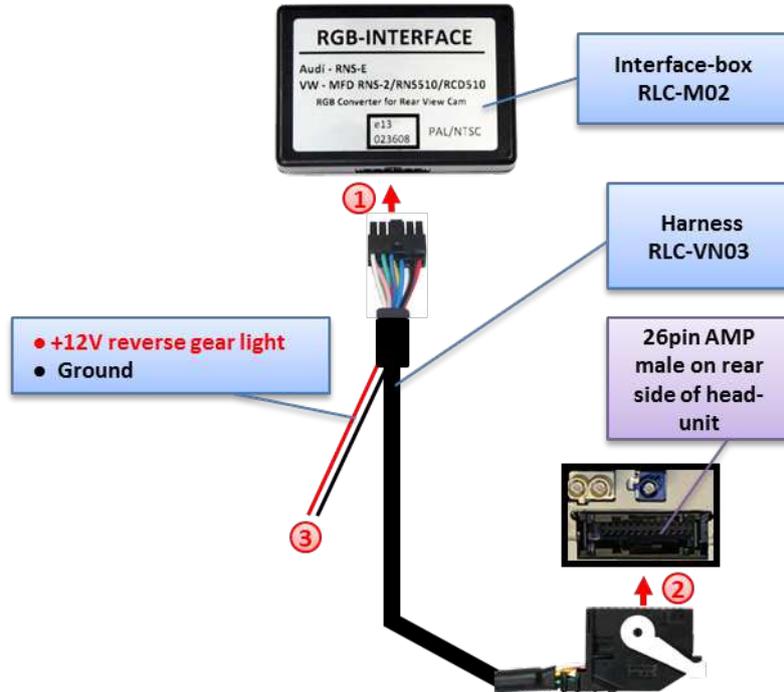


3. Installation

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 behind the head-unit.

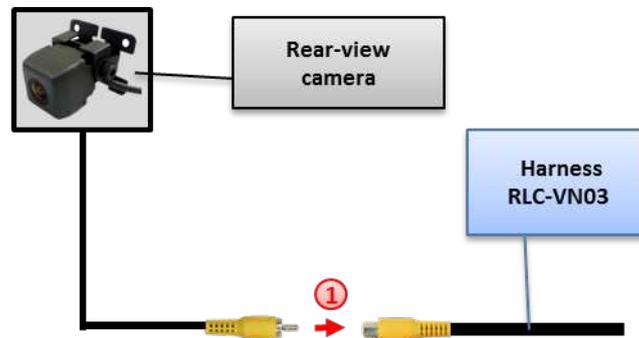
3.1. Interconnecting Interface-Box, harness and head-unit



- ① Plug harness RLC-VN03 into 12pin Molex of Interface-box RLC-M02.
- ② Plug female 26pin AMP connector of RLC-VN03 into male 26pin AMP-connector of head-unit.
- ③ Connect red cable of harness RLC-VN03 to +12V reverse gear light (we suggest to connect through relais to avoid signal noise) and black cable of harness RLC-VN03 to ground.

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.

3.2. Connections to after-market rear-view camera



- 1 Connect the video RCA of the after-market rear-view camera to female RCA connector of harness RLC-VN03.

Note: Only compatible with NTSC-cameras.

The head-unit must be coded to rear-view camera per diagnosis computer or for RNS510, RNS315 and RCD510 with our optional available OBD-coders OBD-301-R (OPS, too).

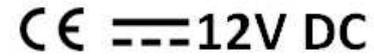
RNS510/810: If coding is done by diagnosis PC, code rear-view camera to "LOW" in controller 56 radio (not in controller 19 - CAN gateway). After coding the vehicles needs to be locked to reach sleep mode (30 seconds up to 66 minutes depending on vehicle).

RNS315: If coding is done by diagnosis PC, code to rear-view camera in controller 37 navigation (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).

4. Specifications

Operation voltage	10.5 – 14.8V DC
Stand-by power drain	0mA
Operation power drain	200mA
Power consumption	2.8W
Temperature range	-30°C to +80°C
Weight	53g
Measurements (box only) B x H x T	72 x 23 x 50mm

A rectangular box containing the CE mark on the left and the text "12V DC" on the right, with a horizontal line above the "V".

5. Technical Support

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