CARAUDIO-SYSTEMS

r.LiNK-Interface

RL-MIB3-2

Rear and front camera input compatible with VW MIB3 systems

Contents

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-M40-MIB3-MIB3
HW_____ SW_____

Harness
RLC-MIB3-2

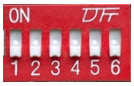
1.2. Check compatibility of vehicle and accessories

Requirements	
Vehicle	VW - T6.1, Passat as of 2019, Tiguan as of 2020
Navigation	MIB3 - Composition Media, Discover Media, Discover Pro
Limitations	
After-market camera	Only compatible with NTSC-cameras.

1.3. Setting the DIP switches of the interface-box RLC-M40-MIB3

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

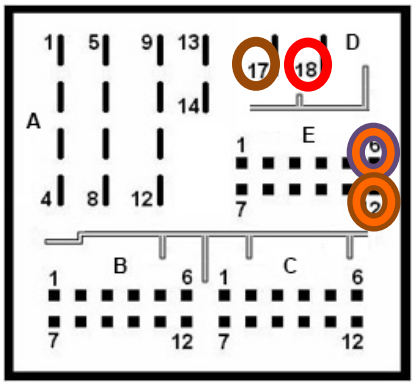
DIP position “down” is OFF and position “up” is ON.



DIP-switch	ON	OFF
DIP 1	Interface coding setting (see point 4)	
DIP 2	Front camera activated	Front camera de-activated
DIP 3-5	No Function (set to **OFF**)	
DIP 6	CAN bus termination (set to **ON**)	

1.4. Pin-assignments

Cable colour	Assignment
Red	+12V permanent Pin 18
Brown	Ground Pin 17
Orange/Violet	CAN HIGH Pin 6
Orange/Brown	CAN LOW Pin 12

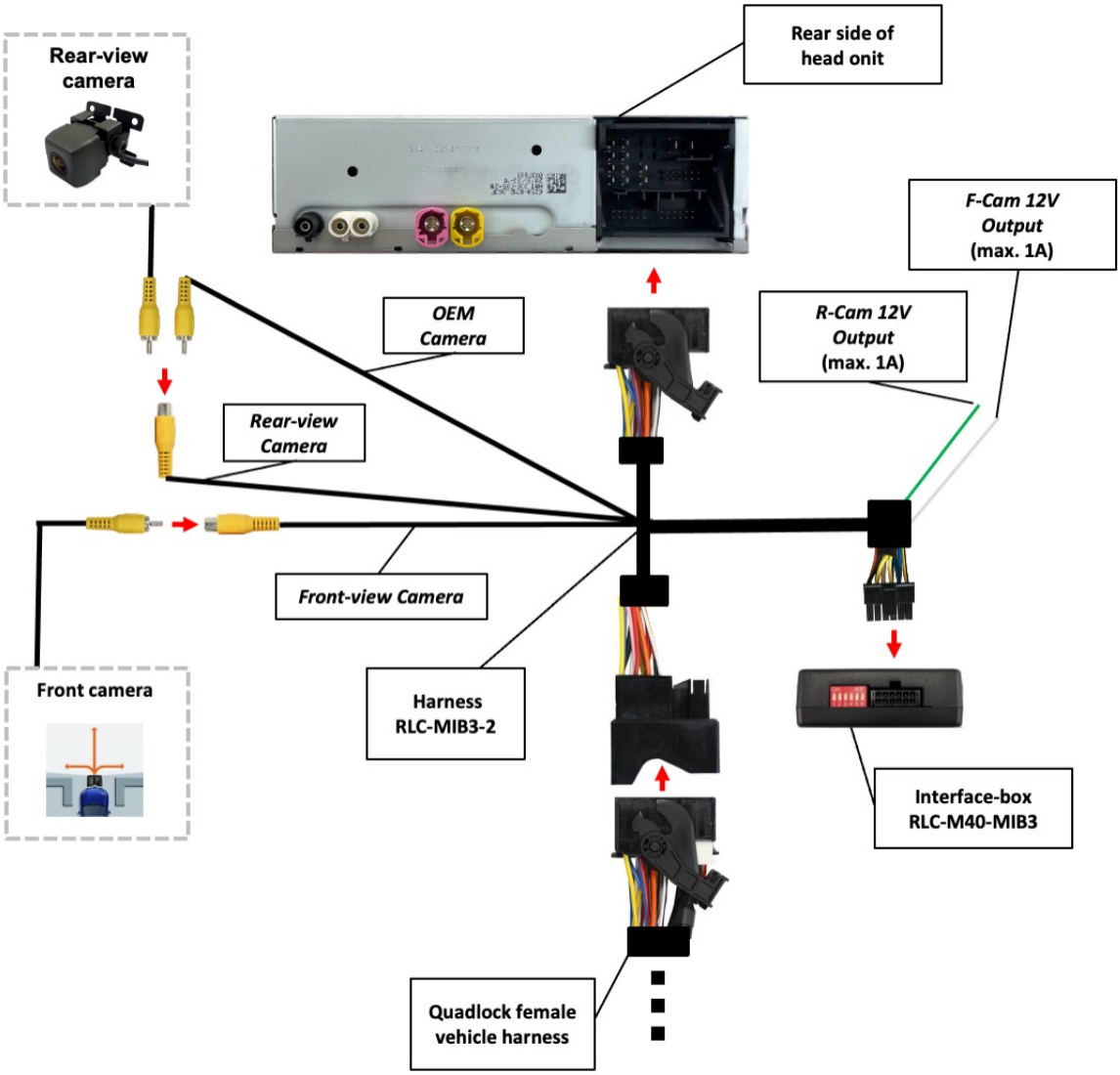


No liability for vehicle wire colors and pin definition! Possible changes by the vehicle manufacturer. The given information must be verified by the installer.

Pin-assignment of the interface-box RLC-M40-MIB3 (Molex 12pin)

Cable colour	Pin-No.	Assignment
Yellow	Pin 6	CAN-HIGH – connection to the head-unit
Blue	Pin 5	CAN-LOW – connection to the head-unit
Yellow/Black	Pin 12	CAN-HIGH – connection to the vehicle
Blue/Black	Pin 11	CAN-LOW – connection to the vehicle
Red	Pin 1	+12V permanent
Black	Pin 7	Ground
Green	Pin 2	+12V rear view camera output (max. 1A)
White	Pin 3	+12V front camera output (max. 1A)
Blue	Pin 4	No function
Yellow	Pin 8	Rear view camera video signal input
Yellow	Pin 10	Front camera video signal input
Transparent	Pin 9	Camera video signal output

2. Connection schema

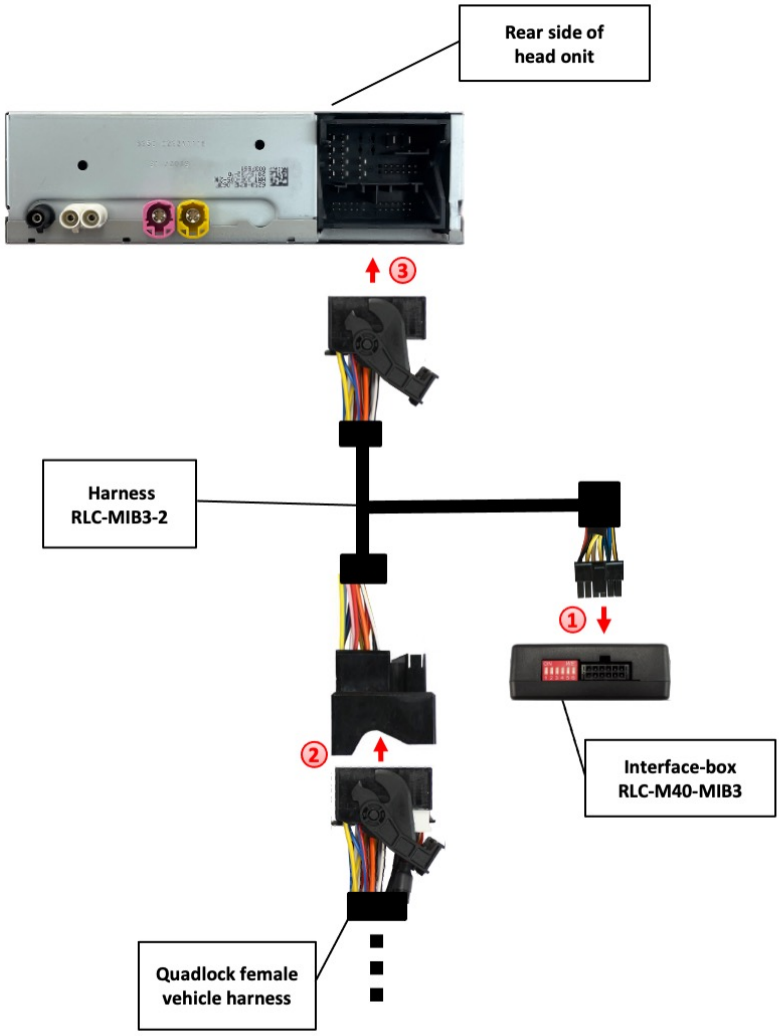


3. Installation

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 rear of the head unit.

3.1. Interconnecting interface-Box, harness and factory head unit

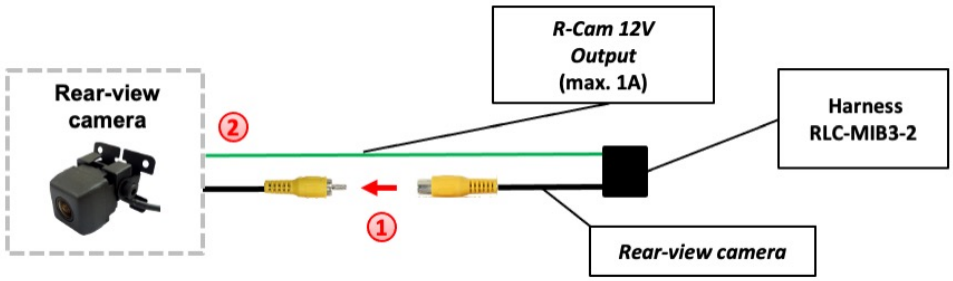


1. Connect female 12pin Molex connector of harness RLC-MIB3-2 to male 12pin Molex connector of CAN-box RLC-M40-MIB3.

2. Remove the female Quadlock connector of the vehicle harness from the rear of the head unit and connect it to the male Quadlock connector of harness RLC-MIB3-2.

3. Connect female Quadlock connector of harness RLC-MIB3-2 to the male Quadlock connector of the head unit.

3.2. Connections to rear-view camera

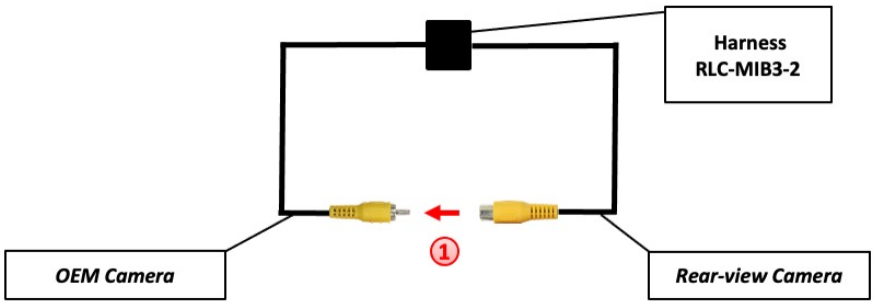


1 Connect the video RCA of the rear-view camera to the female RCA connector with the label „*Rear-view camera*“ of RLC-MIB3-2 harness.

2 Connect the green cable of harness RLC-MIB3-2 to the camera power supply (+12V, max 1A). The green cable gets power when reverse gear is engaged. By leaving the rear camera level (after 30 km/h) the power is switch off again.

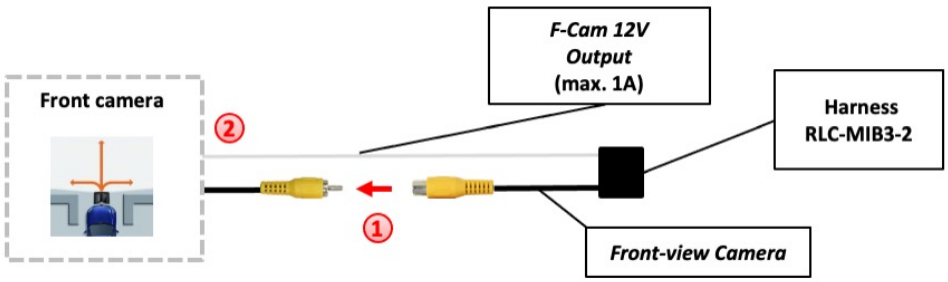
Note: Only compatible with NTSC-cameras.

3.2.1. Factory rear-view camera



1 If there is a factory rear-view camera installed, connect the male RCA plug with the label „OEM Camera“ to the female RCA connector with the label „Rear-view Camera“ from RLC-POR03-2 harness.

3.3. Connections to front camera



1 Connect the video RCA of the front camera to the female RCA connector with the label „*Front-view Camera*“ of RLC-MIB3-2 harness.

2 Connect the white cable of harness RLC-MIB3-2 to the camera power supply (+12V, max 1A). The white cable gets power when reverse gear is engaged. By leaving the front camera level (after 30 km/h) the power is switch off again.

Note: Only compatible with NTSC-cameras.

4. Coding of the camera function

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

4.1. Camera function coding

1. Set DIP switch „1“ to „OFF“
2. Turn ignition on (ignition position 2)
3. Wait until the MIB3 device has booted
4. Set DIP switch "1" to "ON" for 3 seconds and then back to "OFF" position (red LED flashes slowly, after a short time the monitor goes out for a few seconds)
5. The coding process is now complete (red LED is on)

4.2. Camera function decoding

1. Set DIP switch „1“ to „OFF“
2. Turn ignition on (ignition position 2)
3. Wait until the MIB3 device has booted
4. Set DIP switch "1" to "ON" for 3 seconds and then back to "OFF" position (red LED flashes slowly, after a short time the monitor goes out for a few seconds)
5. The decoding process is now complete

Note: After a coding or decoding another coding isn’t possible within the next 30 seconds!

LED information:

LED	Status	Explication
Blue	Lights	CAN bus communication OK
	Flashes quickly	CAN bus communication error
Red	Lights	Normal operating mode: Interface is on Coding mode: Rear-view camera is coded
	Off	Normal operating mode: Interface is off Coding mode: Rear-view camera is not coded
	Flashes slowly	Coding process is running
	Flashes quickly	The coding process was aborted with an error

5. Front camera activation

DIP 1	DIP 2	DIP 3	DIP 4	DIP 5	DIP 6
OFF	**ON**	OFF	OFF	OFF	**ON**

DIP 2 switch „**ON**“: Front camera activated. Switches off automatically.

5.1. Front camera function

The front camera input is activated as soon the reverse gear is taken out. The front camera input is automatically deactivated when approx. 20 km/h was reached.

6. Specifications

Operation voltage	10.5 – 14.8V
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) W x H x D 70 x 20 x 47 mm/ 76 x 27 x 54 mm

7. Technical support

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