

InCarTec

r.LiNK-Interface

27-313

RL-LR12-TF

Rear-view camera-input and video-in-motion compatible with Landrover touch-screen navigation systems from model 2012

Only for vehicles WITHOUT factory rear-view camera

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Legal Information

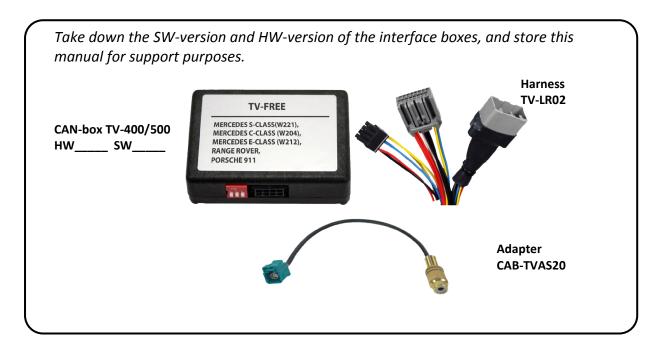
By law, watching moving pictures while driving is prohibited, the driver must not be distracted. We do not accept any liability for material damage or personal injury resulting, directly or indirectly, from installation or operation of this product. This product should only be used while standing or 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.

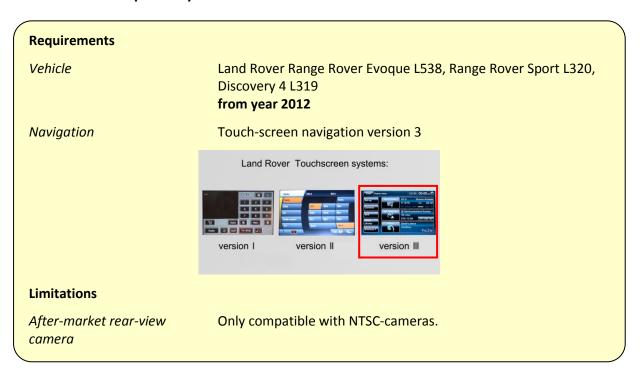
1. Prior to installation

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



1.2. Check compatibility of vehicle and accessories



1.3. Setting the dip switches of the CAN-box TV-400/500

TV-400

Alle vehicles dip 1 ON, dip 2 ON, dip 3 ON

Note: Setting dip 1 to ON codes the factory rear-view camera input which is located on the 6pin male connector of the factory monitor. When reverse gear is engaged, the navigation will automatically switch to this input.

TV-500

Vehicle/ navigation	Dip 1	Dip 2	Dip 3	Dip 4	Dip 5	Dip 6
Video-in-motion permanent	ON	ON	OFF	OFF	ON	ON
Video-in-motion selective*	OFF	ON	OFF	OFF	ON	ON

^{*} With dip1 to OFF the included green cable is used to activate the video-in-motion function

Note: Dip switch functions of the TV-500

Dip 1 - activation TV-free

Dip 2 - rear-view camera existing

Dip 3 – TV icon simulation

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

Setting dip 2 to ON codes the factory rear-view camera input which is located on the brown Fakra male connector of the factory monitor. When reverse gear is engaged, the navigation will automatically switch to this input. On vehicles with factory rear-view camera set Dip 2 to ON, too.

1.4. Pin-assignments

Pin-assignment factory monitor connector

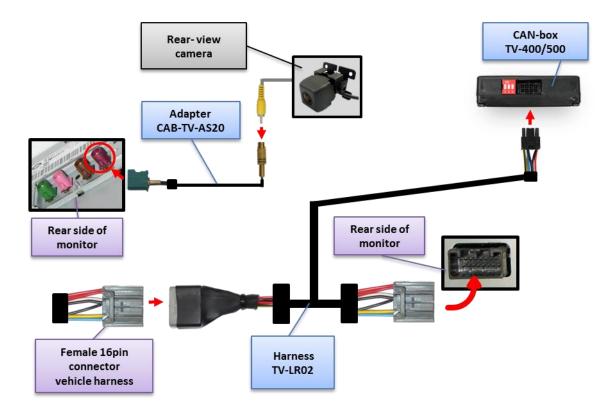
Cable colour	Assignment		
Orange/grey	CAN-HIGH Pin 2		
Orange/purple	CAN-LOW Pin 1		

The colour of the wires may vary due to possible changes by the vehicle manufacturer. The given information must be verified by the installer.

Pin-assignment of the CAN-Box TV-400 (Molex 8pin)

Cable colou	r Pin-No.	Assignment
Yellow	Pin 4	CAN-HIGH – connection to the head-unit
Blue	Pin 3	CAN-LOW – connection to the head-unit
Yellow/	Black Pin 8	CAN-HIGH – connection to the vehicle
Blue/Bl	ack Pin 7	CAN-LOW – connection to the vehicle
Red	Pin 1	+12V permanent
Black	Pin 5	Ground
• Green	Pin 6	Activation of the video-in-motion function (+12V = TV-free activated)
White	Pin 2	Trigger output (+12V DC 500mA)

2. Connection schematic

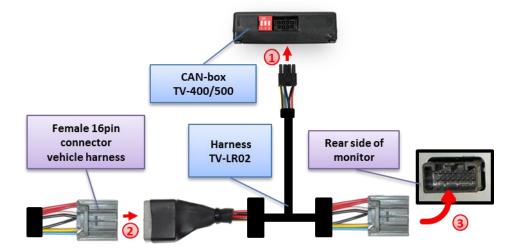


3. Installation

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 this does not work, disconnect the battery with a resistor lead.

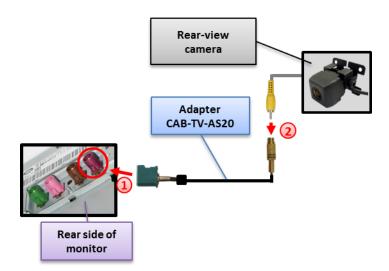
Place of installation is on rear of the factory navigation monitor.

3.1. Interconnecting CAN-Box, harness and factory navigation monitor



- 1 Connect female 8pin Molex connector of harness TV-LR02 to male 8pin Molex connector of CAN-box TV-400/500.
- 2 Transfer female 16pin connector of vehicle harness from rear of the factory navigation monitor into male 16pin connector of harness TV-LR02.
- 3 Plug female 16pin connector of harness TV-LR02 into male 16pin connector on the rear of the factory navigation system.

3.2. Connections to rear-view camera



- Connect female Fakra-connector of adapter CAB-TV-AS20 to the male purple Fakra-connector on the rear of the factory navigation monitor.
- Connect the video RCA of the rear-view camera to the female RCA connector of adapter CAB-TV-AS20.

Note: Only compatible with NTSC-cameras.

4. Activation of the video-in-motion function

TV-400

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

Note: The loose white and green cable are not required and must be isolated.

TV-500

The video-in-motion can be activated and deactivated by Dip 1 or alternatively by the included loose green cable in connection with a switch (not included in delivery).

Video-in-motion permanent

With dip1 to ON the video-in-motion function is activated permanently without disturbing the navigation performance.

<u>Video-in-motion selective</u>

With dip1 to OFF the included green cable is used to activate the video-in-motion function.

Connect a switch to the green cable and connect the green cable to +12V ACC.

• +12V = TV-Free is activated

OV = TV-Free is not activated

Note: The loose white cable is not required and must be isolated.

5. 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