



TV-Free

Video-in-motion Interface

TF-LR12

for Landrover and Jaguar touch-screen navigation systems version 3 since 2012

ATTENTION! The TF-Free the backside is installed on the monitor!!!

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.

Version 12.02.2013 TF-LR12





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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.

CAN-box TV-500

HW _____ SW _____

TV-LR02

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1.2. Check compatibility of vehicle and accessories



1.3. Setting the Dip-switches of the Can-Box TV-500

Vehicle/ navigation	Dip 1	Dip 2	Dip 3	Dip 4	Dip 5	Dip 6
Land Rover without rear-view camera	ON*	OFF	OFF	OFF	ON	ON
Land Rover with rear-view camera	ON*	ON	OFF	OFF	ON	ON
Jaguar	ON*	OFF	OFF	OFF	OFF	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 (only Land Rover)

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

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 CAN-Box TV-500 (Molex 8pin)

Cable colour	Pin-No.	Assignment
Yellow	Pin 4	CAN-HIGH – connection to the head-unit
Blue	Pin 3	CAN-LOW – connection to the head-unit
Yellow/Bla	ck Pin 8	CAN-HIGH – connection to the vehicle
Blue/Black	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. 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 at the back of the factory monitor.

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3. Activation of the video-in-motion function

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.

Video-in-motion selective

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

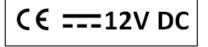
Note: The loose white cable is not required and must be isolated.

4. 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 76 x 27 x 54 mm



5. Technical Support

Caraudio-Systems Vertriebs GmbH manufacturer/distribution
Rheinhorststr. 22

D-67071 Ludwigshafen am Rhein

NavLinkz GmbH corporate sales/tech dealer-support

Eurotec-Ring 45 D-47445 Moers

phone +49 180 3 907050 email support@caraudio-systems.de

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