

TV-Free Video-in-motion Interface

TF-RTI11

compatible with Volvo RTI 2011 navigation systems

**ATTENTION! The TF-Free
is installed on the backside
of 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.

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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.

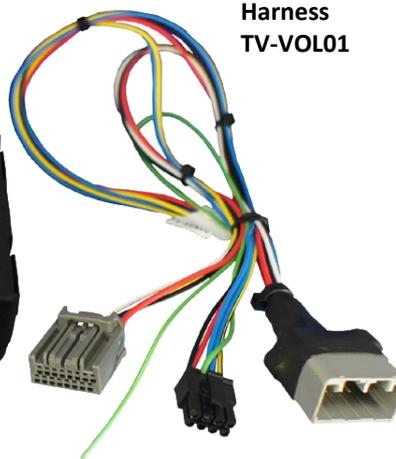
1.1. Delivery contents

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 _____



Harness
TV-VOL01



1.2. Check compatibility of vehicle and accessories

Requirements	
<i>Vehicle</i>	Volvo S-series, V-series, XC60
<i>Navigation</i>	RTI 2011
Limitations	
<i>Vehicles with lane pilot, distance assistant and city safety system</i>	The included green cable is used to activate the video-in-motion function (+12V = activated).
Lane pilot, distance assistant and city safety system do not work while TV-free is activated!	

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

Fahrzeug/ Navigation	Dip 1	Dip 2	Dip 3	Dip 4	Dip 5	Dip 6
Vehicles WITHOUT extra equipment (lane pilot, distance assistant, city safety system), V40 (model year 2013)	ON	OFF	OFF	OFF	ON	ON
Vehicles WITH extra equipment (lane pilot, distance assistant, city safety system)	OFF	OFF	OFF	OFF	ON	ON

Note: Dip switch functions of the TV-500

Dip 1 – activation TV-free

Dip 2 – no function

Dip 3 – no function

Dip 4 – no function

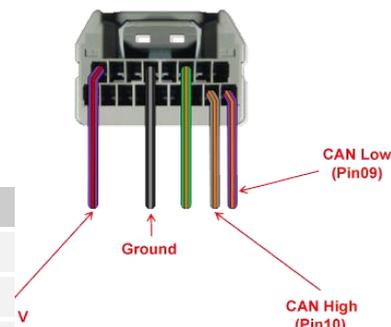
Dip 5 – CAN-bus termination resistor on the vehicle side

Dip 6 – CAN-bus termination resistor on the head-unit side

1.4. Pin-assignments

Pin-assignment factory monitor connector

Cable colour	Assignment
●● Purple/Red	+12V Permanent
●● Black/Grey	Ground
●● Grey/Orange	CAN HIGH Pin 10
●● Purple/Orange	CAN LOW Pin 09



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/Black	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.

3. Activation of the video-in-motion function

3.1. Vehicles without extra equipment and V40 (model year 2013)

On vehicles without extra equipment and V40 (model year 2013) and Dip1 to ON (see chapter "Setting the Dip-switches of the Can-Box TV-500") 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.

3.2. Vehicles with extra equipment

On vehicles with extra equipment and Dip1 to OFF (see chapter “Setting the Dip-switches of the Can-Box TV-500”) 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.

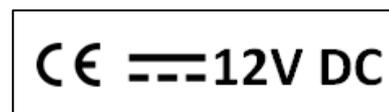
- +12V = TV-Free is activated
- 0V = TV-Free is not activated

Note: *As long as the video-in-motion function is activated, the navigation will NOT be working!*

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

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