

## **CAN Upgrade 1.6 to 2.0 interface with video-in-motion**

### **CXS-MFD3**

**Compatible with installation of VW MFD3/RNS510  
navigation systems  
into older VW T5 and Touareg vehicles  
with CAN-bus protocol 1.6**

#### **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

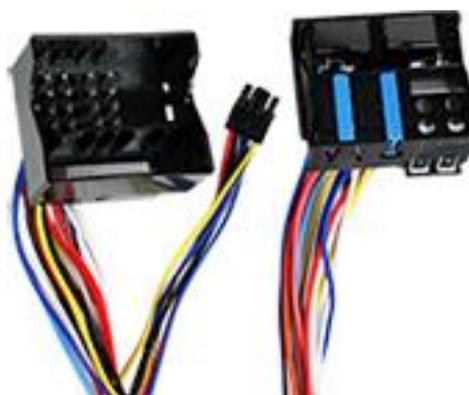
Read the manual prior to installation. Technical knowledge is necessary for installation. The place of installation must be free of moisture and away from heat sources.

### 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-510  
HW\_\_\_\_ SW\_\_\_\_

Harness  
TV-VW01



## 1.2. Check compatibility of vehicle and accessories

Requirements	
Vehicle	older Volkswagen Touareg and T5 <b>with CAN-bus protocol 1.6</b>
Unit	RNS510, RCD510, RNS310, RCD310
Limitations	for vehicles WITHOUT Soundsystem

## 1.3. Setting the Dip-switches of the Can-Box TV-510

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

\* 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 – 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

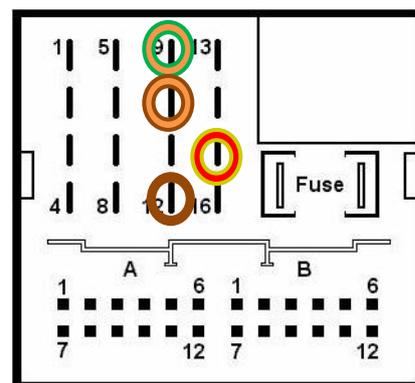
## 1.4. Pin-assignments

### Pin-assignment vehicle connector

Cable colour	Assignment
● Red/Yellow	+12Volt Permanent Pin 15
● Brown	Ground Pin 12
● Orange/Green	CAN HIGH Pin 9
● Orange/Brown	CAN LOW Pin 10

### Pin-assignment of the CAN-Box TV-510 (Molex 8pin)

Cable colour	Assignment
● Red	+12Volt Permanent Pin 4
● Black	Ground Pin 8
● Yellow	CAN HIGH Navi Pin 1
● Blue	CAN LOW Navi Pin 2
● Yellow/Black	CAN High Vehicle Pin 5
● Blue/Black	CAN Low Vehicle Pin 6



## 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.**

**Note:** The loose white and green cable of harness TV-VW01 are not required and must be isolated.

1. Remove the navigation computer from the centre console with the accordant tool kit (not included).
2. Disconnect Quadlock connector from the backside of the navigation computer and connect it to harness TV-VW01. If the original Quadlock connector carries 12pin inserts, disconnect the inserts and connect them to harness TV-VW01. Connect TV-VW01 to the navigation computer.

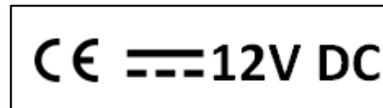


## 3. Activation of the video-in-motion function

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

## 4. Specifications

Operation voltage	10.5 – 14.8V
Stand-by power drain	>1mA
Operation power drain	~60mA
Power consumption	~0,72W
Temperature range	-30°C to +80°C
Weight	44g
Measurements (box only) B x H x T	70 x 20 x 47 mm



## 5. Technical Support

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