

TV-Free Video-in-motion Interface

TF-NBT

Compatible with BMW Professional NBT navigation systems

Attention! Before installation, make sure the vehicle's navigation system is a "Professional", not "Business"!!!

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

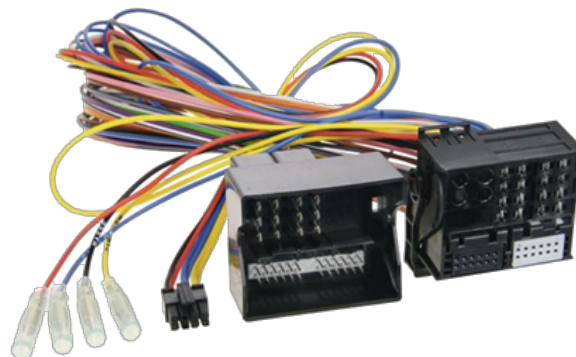
Read the manual prior to installation. Technical knowledge is necessary for installation. The place of installation must be free of moisture and away from heat sources.

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-BM01



With USB update-port for software-updates by consumer!

1.2. Check compatibility of vehicle and accessories

Requirements

<i>Vehicle</i>	1series (F20/21), 3series (F30/31/32/33), 5series (F10/F11) from approx 08/2012, 7series (F01/F02) from approx 08/2012, 7series (G11/G12) from approx 10/2015
<i>Navigation</i>	Navigation system Professional NBT

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
Video-in-motion permanent	ON	OFF	OFF	OFF	ON	ON
Video-in-motion selective*	OFF	OFF	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 – no function

Dip 3 – no function

Dip 4 – no function

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

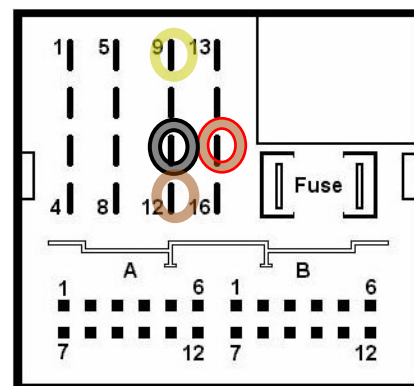
Dip 6 – CAN-bus termination resistor on the head-unit side

1.4. Pin-assignments

Pin-assignment vehicle connector

●●	Brown/Red	+12V permanent	Pin 15
●	Brown	Ground	Pin 12
●	Yellow	CAN Low	Pin 9
●	Black	CAN High	Pin 11

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 8-Pin)

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.

Note: Any existing fiber optical cables on the original Quadlock plug must be reconnected to the TV-BMW01 harness.

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.

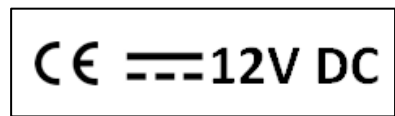
Connect a switch to the green cable and connect the green cable to +12V ACC.

- +12V = TV-Free is activated
- 0V = 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	38g
Measurements (box only) W x H x D	70 x 20 x 47 mm



5. Technical support

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