

## **TV-Free** Video-in-motion Interface

### **TF-FSYNC54**

#### **For Ford, Lincoln Sync system with 54 pin connector**

#### **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!*

Harness  
TV-FS54



CAN-box TV-500  
HW\_\_\_\_ SW\_\_\_\_



CAN-box TV-500  
HW\_\_\_\_ SW\_\_\_\_

## 1.2. Check compatibility of vehicle and accessories

Requirements	
<i>Vehicle</i>	Ford, Lincoln
<i>Navigation</i>	Sync with 54 pin connector
Limitations	
<i>Navigation</i>	While the video-in-motion function is active, the navigation will not work!

## 1.3. Dip-switch settings of the Can-Box TV-500 modules

### Setting the Dip-switches of the Can-Box TV-500 connected on the 500KB 8Pin Molex plug

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

\* With dip1 to OFF the included green cables are 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

### Setting the Dip-switches of the Can-Box TV-500 connected on the 125KB 8Pin Molex plug

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

\* With dip1 to OFF the included green cables are 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

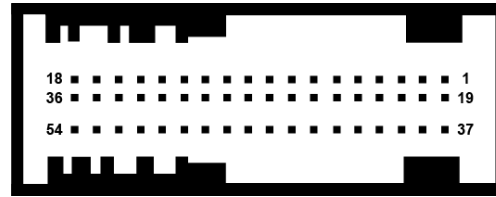
Dip 5 – CAN-bus termination resistor on the vehicle side

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

## 1.4. Pin-assignments

### Pin-assignment vehicle connector

Assignment
+12Volt Permanent - Pin 1
Ground - Pin 37
CAN HIGH (500KB) - Pin 19
CAN LOW (500KB) - Pin 18
CAN HIGH (125KB) - Pin 16
CAN LOW (125KB) - Pin 17



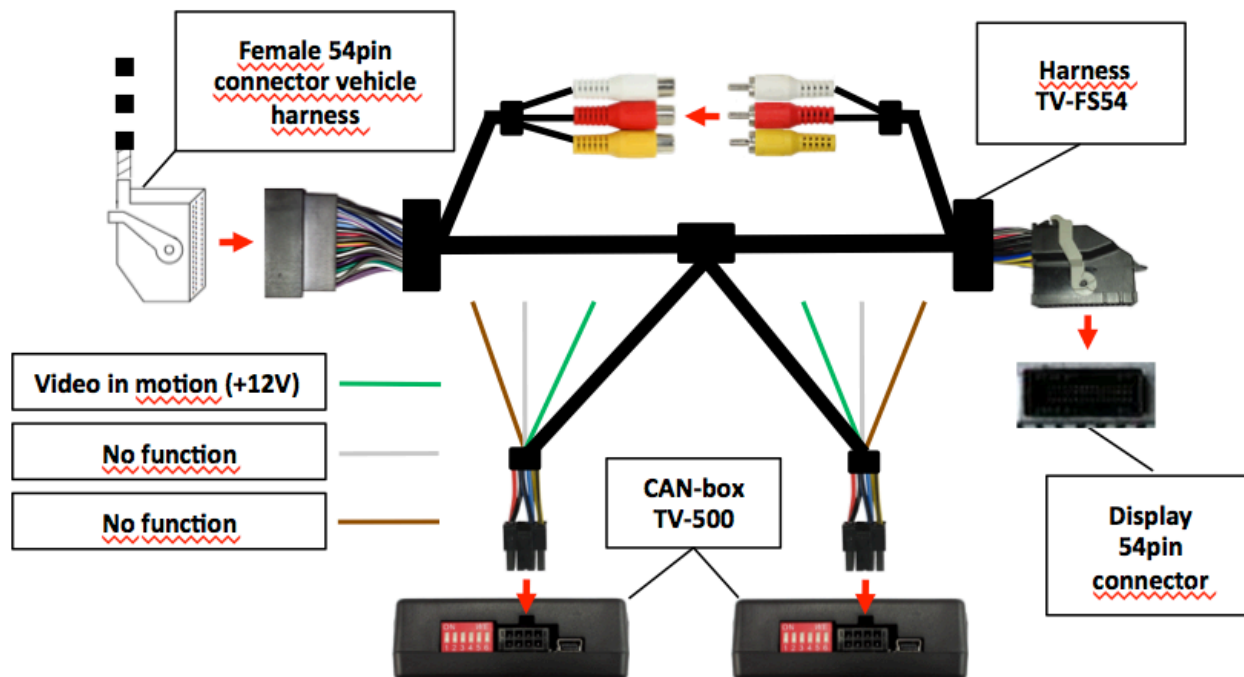
### Pin-assignment of the CAN-Box TV-500 (Molex 8pin)

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)

**Note: Cinch plugs on the harness forward the factory camera picture and AUX signal and must therefore remain connected.**

**The open brown and white cables serve no function and must be isolated.**

## 1.5. Connection schema



## 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.**

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

The video-in-motion can be activated and deactivated by Dip 1 on both TV-500 modules or alternatively by the included loose green cables in connection with a switch (not included in delivery).

### Video-in-motion permanent

With dip1 to ON on both TV-500 modules the video-in-motion function is activated permanently. The navigation can not be used.

### Video-in-motion selective (recommended for the use of navigation)

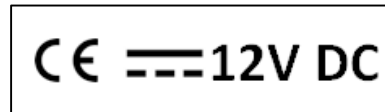
With dip1 to OFF on both TV-500 modules the included green cables are used to activate the video-in-motion function.

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

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

## 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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