

Installation manual
FISCUBE®
VW

Article-ID 38362
 38362-1

VW Touareg 7P
Head unit RNS 850

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General advice

While developing this product, your personal safety combined with the best operating service, modern design and an up-to-date production technique was especially taken into account.

Unfortunately, despite the utmost care injuries and/or damages might occur due to improper installation and/or use.

Please read the attached instruction manual completely with great care and keep it!

All articles of our production line pass through a 100 % check - for your safety and security.

We reserve the right to carry out technical changes which serve the improvement at any time.

According to each article and purpose, it is sometimes necessary to check each country's legal regulations before installing and starting the unit.

In case of guarantee claims, the device has to be sent back to the seller in the original packaging with the attached bill of purchase and detailed defect's description. Please pay attention to the manufacturer's return requirements (RMA). The legal warranty directions are valid.

The guarantee claim as well as the operating permission becomes invalid due to:

- a) *unauthorized changes to the device or accessories which have not been approved or carried out by the manufacturer or its partners*
- b) *opening the device's frame*
- c) *device's repairs carried out by one's own*
- d) *improper use / operation*
- e) *brute force to the device (drop, willful damage, accident etc.)*

During installation, please pay attention to all safety relevant and legal directions. The device has only to be installed by trained personnel or similarly qualified people.

Safety Instructions

Installation requires special knowledge.

Do not install the unit yourself. For safe and reliable installation, consult a dealer having special knowledge.

- *Never use bolts or nuts from the car's safety devices for installation. If bolts or nuts from the steering wheel, brakes or other safety devices are used for installation of the unit, it may cause an accident.*
- *Use the unit with a DC 12V negative ground car. This unit cannot be used in large trucks which use a DC 24V battery. If it is used with a DC 24V battery, it may cause a fire or accident.*
- *Avoid installing the unit in following places: - Where it would hinder your safe driving. - Where it could damage the car's fittings.*
- *This unit is only for use in the following vehicles. Only connections described within this instruction guide are allowed or required to use for installation.*
- *For damage impact caused by faulty installation, unsuitable connections inappropriate vehicles Kufatec GmbH & Co. KG assumes no liability.*
- *We advise you that these units process data out of the MOST - protocol from the vehicle. As the supplier of this device we don't know the overall system you are working with. If our device causes damage due to other changes made by to the vehicle Kufatec GmbH & Co. KG assumes no liability.*
- *Kufatec GmbH & Co. KG supplier does not guaranty the use of the product for changing's within a new vehicle series.*
- *If the car manufacturer's don't agree with the installation of our device by reason of warranty the Kufatec GmbH & Co. KG assumes no liability. Please check conditions and warranty before you begin the installation.*
- *Kufatec GmbH & Co. KG supplier reserves the right to change the device specifications without notice.*

NOTE: The road traffic has to have your full attention.

Operations should only be done by suitable traffic and weather situations. The volume need to be set that you are still able to realise acoustic warn signals (Police, fire brigade).

- *Errors and changes excepted.*

References of legal regulations for operation

Only use this unit in the intended domain.

If you use it in a foreign domain, if the unit is not installed properly, or if the unit will be reconstructed, the guarantee will expire.

FISCUBE

Features

- DVB-T** – Integrated DVB-T receiver with TV recording function
E13 approval - 10R-03-12423
Video/Audio coding: MPEG II (No MPEG4 /HDTV)
TV recording stored on USB source – Recording capacity 3h with an 5GB USB-memory
TV recording format: *.mpg
Dimensions (LxBxH): 11,4cm x 9,2cm x 3,1cm
- USB** - USB connection for memory stick or HDD (FAT 32) – limited capacity 40GB
NOTE: Only for hard drives with current consumption not more than 500mA - it's necessary to have a external power supply with capacity over 500mA.
Supported audio format: mp3, wav
Supported video format: mpg; *.dat; *.vob; *.avi with MPEG4 ASP.
USB extension must not be longer than 2 meter!

NOTE USB Root directory

Up to 95 entries can be stored within the root directory. Each entry can include another 95 entries.

NOTE: Entries consists of single files as well as directories.

NOTE: Before installing the multimedia system you need to check whether the car is retrofitted with an interface not developed by Kufatec GmbH & Co. KG. In case a non-Kufatec interface is fitted we are not able to guaranty the absolute operation of the FISCUBE system. You may need to remove the non-Kufatec interface.

NOTE: Fiber optical looms MUST NOT BE CRACKED! The recommended radius for fitting is 40 mm.

In case of incorrect fitting we are not able to guaranty the absolute operation of the multimedia system.

NOTE: After the very first installation the system is completing an automatic generated search for available TV channels. For refreshing the channel list please see section „Start –up”.

Scope of delivery

FISCUBE Interface
Wiring
Aerials 2x

Wiring diagram

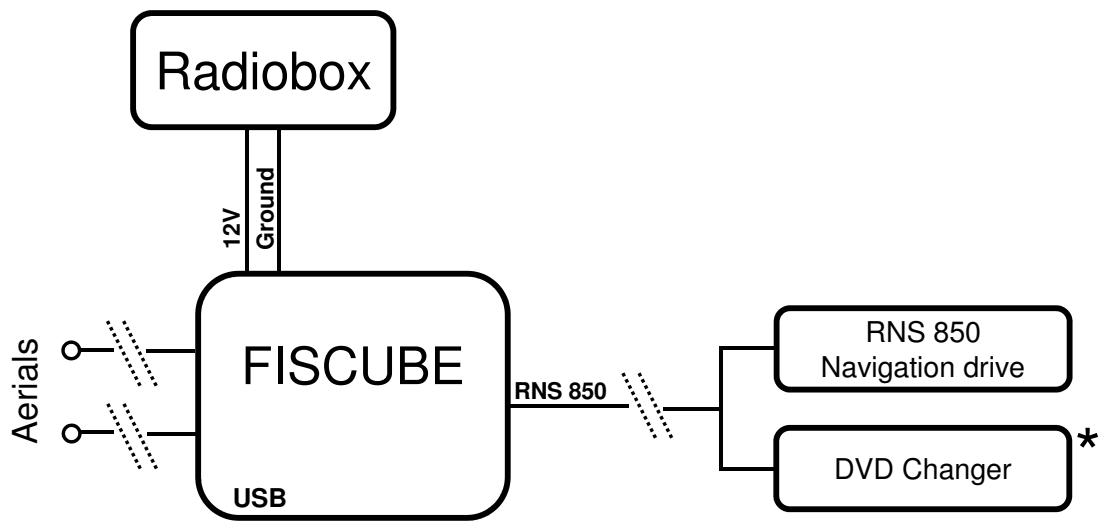


Fig.1

* If factory fitted

Installation instruction

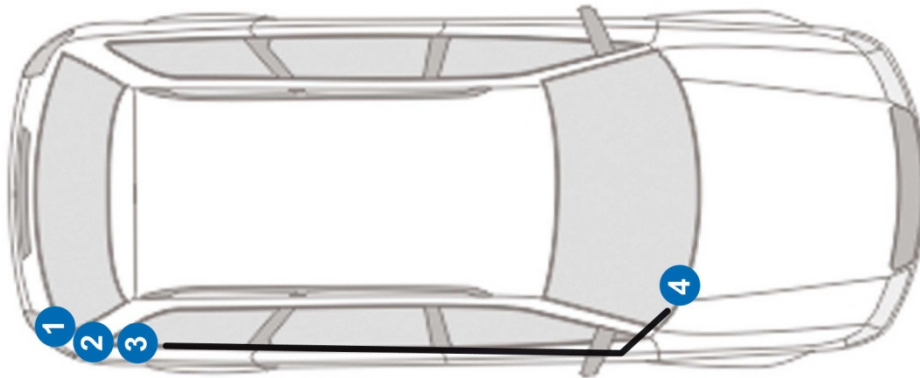


Fig. 2

1 – Radiobox

2 – DVD-Changer (If factory fitted)

3 – FISCUBE Interface

4 – Navigation drive RNS 850

Location Radiobox

Remove the hatch cover. Loosen the necessary screws of the cover on the right hand side. Loosen the necessary screws of the D-post cover.



Fig.3



Fig.4



Fig.5

Removing the cover of the trunk. The radiobox is vertical fitted next to the infotainment rack.



Fig.6

Interface connection

Optical loom

Remove the original fiber optical cable of the radio box. Join the original fiber optical connector to the female connector of the delivered loom (Fig. 8).

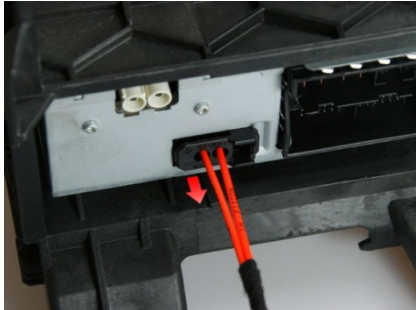


Fig.7

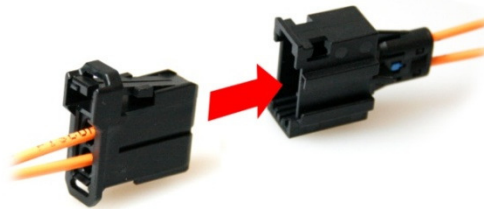


Fig.8

Put the optical connector of the delivered loom to the radiobox (Fig. 9). Figure 10 is showing the final connection of the interface.

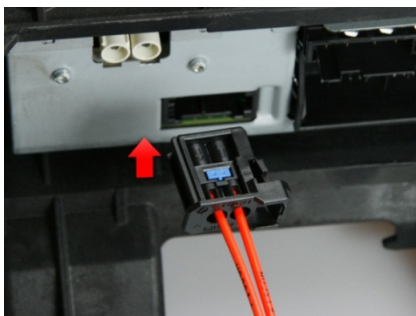


Fig.9

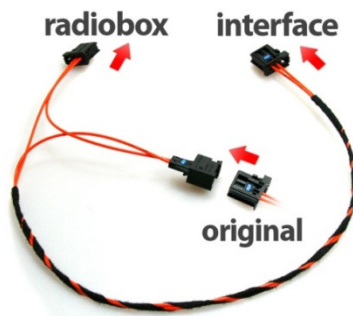


Fig.10

Join the 18-pole connector as well as the fiber optical to the FISCUBE interface.

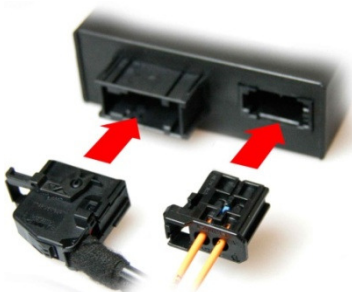


Fig.11



Fig.12

Aerials

NOTE: Sequence of Installation – Aerials needs to be connected to the interface **FIRST**. **AFTER** connecting the aerials the **power** supply can be completed. In case this sequence will be not considered the TV reception can be weak. The number of available channels could decrease.

To ensure correct operation, aerials should be installed far from: - shielded glasses/ Bodywork/ Other parts – which may prevent a good signal reception.

Mount the supplied areal horizontally or vertically. It is recommended to try different positions to assess the ideal location for the positioning of the aerials within the vehicle.

Power

With the connection of 2 new wires you will complete the fitting of the power supply. Please see Fig 14. In order to achieve a proper connection we recommend both crimping and soldering the new wires.

NOTE: Color of the loom can be gray – Connection according loom printing.

BROWN–PIN 17

RED–PIN 18

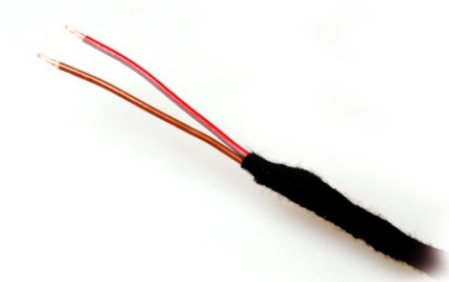


Fig.13

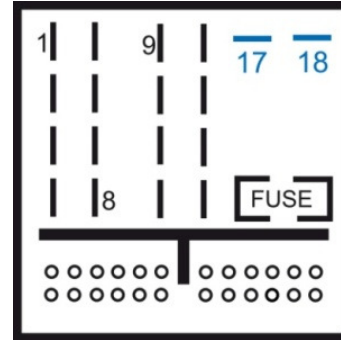


Fig.14

Connection video loom

Wire the loom into the front of the vehicle.



Fig.15

Loosen the necessary screws of the glove box. Disconnect the factory connections of the RNS 850 drive.



Fig.16



Fig.17



Fig.18

Remove the drive RNS 850. Connect the video loom to the **RNS 850 unit – FAKRA GREEN.**



Fig.19



NOTE: In case the vehicle is factory fitted with DVD-changer the video loom has to be connected to the DVD-changer.



Fig.20



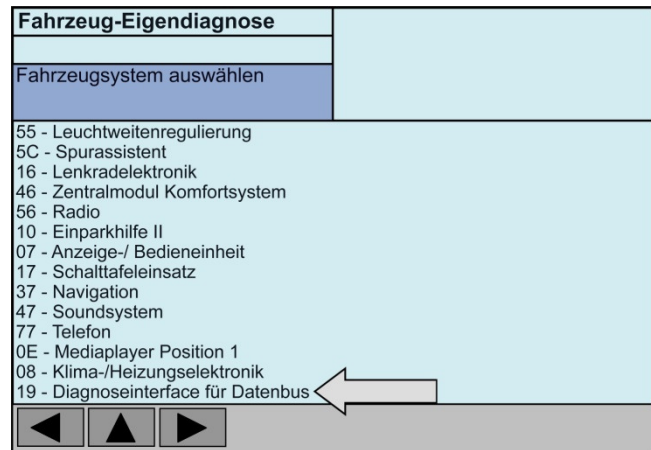
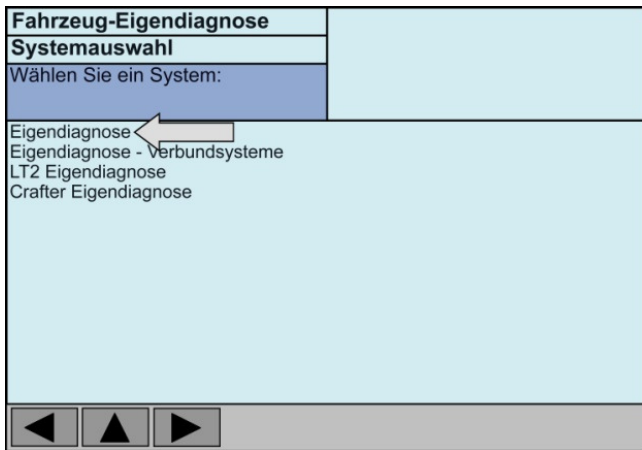
Fig.21

Coding

After installation the system needs to be coded. Please contact a VW dealer.

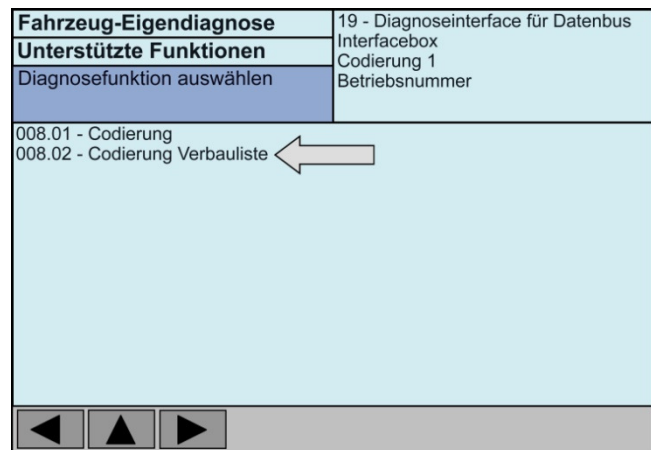
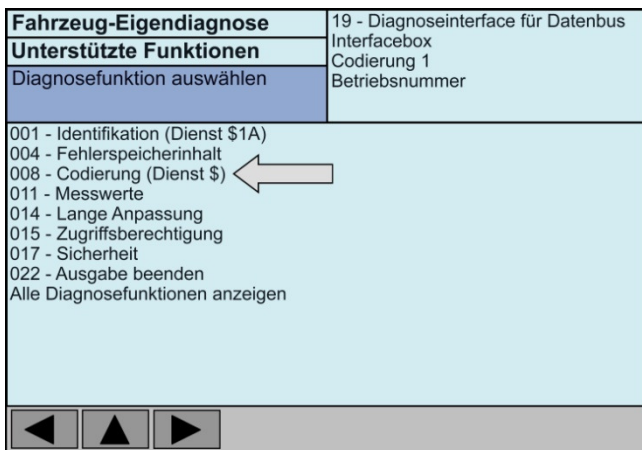
In order to code the vehicle system you need to choose the **Self-Diagnosis**. Please complete the coding step by step as shown on images below.

Address 19



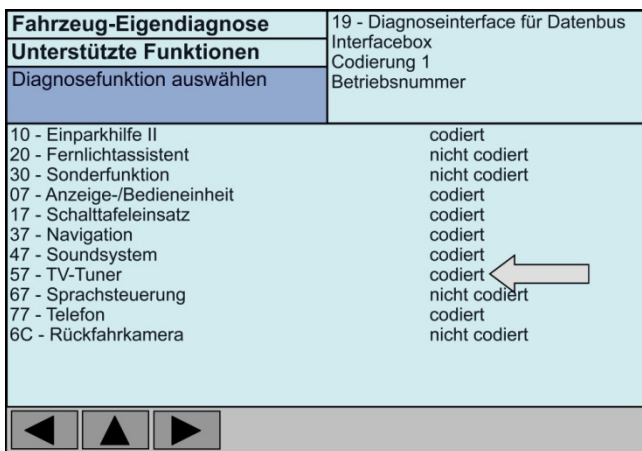
Vehicle Self-Diagnosis

Address 19 Diagnostic interface



Coding

Coding list



TV-Tuner needs to be set from not coded to coded - confirmation

USB-connection

Connecting of USB-memory sticks or hard disc drives (HDD)

MP3 music / video via USB

The whole memory capacity (Audio + Video) is up to 40GB - Format **FAT32**

NOTE: Only for hard drives with current consumption not more than 500mA - it's necessary to have an external power supply with capacity over 500mA.

Root directory for the complete USB source (audio + video):

Up to **95 entries** can be stored within the root directory. Each entry can include another 95 entries.

NOTE: Entries consists of single files as well as directories.

Supported audio format: *.mp3, *.wav

Supported video format: *.mpg; *.dat; *.vob; *.avi (MPEG4 ASP, XviD, DivX4.0/5.0/6.0)

Files will be filtered autom. – In USB audio mode only audio files will be displayed. In USB video mode only video files will be displayed.

Last-Position-Memory:

- For music files - the last listen track will start again from the beginning
- For video files - will start again directly where the video has been stopped playing

TV Recording

NOTE: In order to record TV an USB source has to be connected. The source need to have enough capacity for recording.

Recording capacity 3h with an 5GB USB-memory

TV recording format: *.mpg

Control elements

Multifunctional steering wheel

By pushing the menu button you will reach the TV menu. By using the arrow buttons the single options will be selected. By using the **OK** button you will confirm the selection. In order to leave the menu please select the menu back or the back button.

Volume adjustment will be done on the left hand side.



Fig.22

Driver information system

The FISCUBE menu will be also displayed within the instrument cluster.

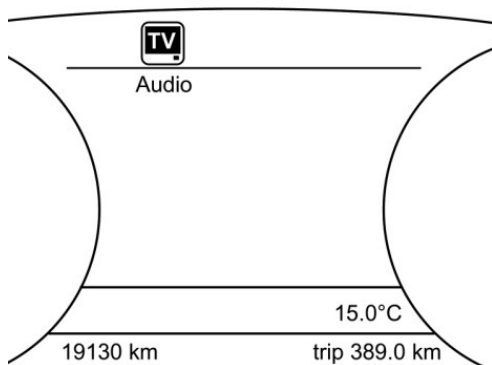


Fig.23

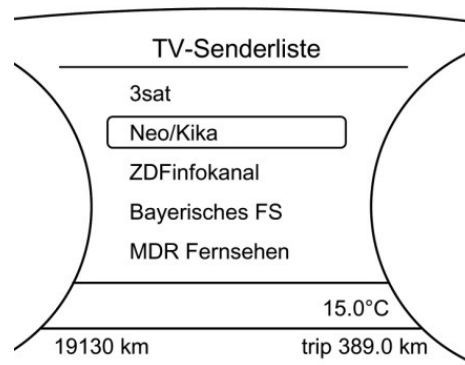


Fig.24

RNS 850 operation panel

OEM-menu driven operation by using the RNS 850 panel as well as the touch screen.

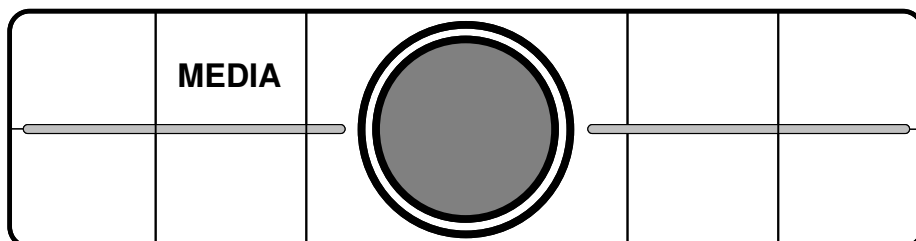
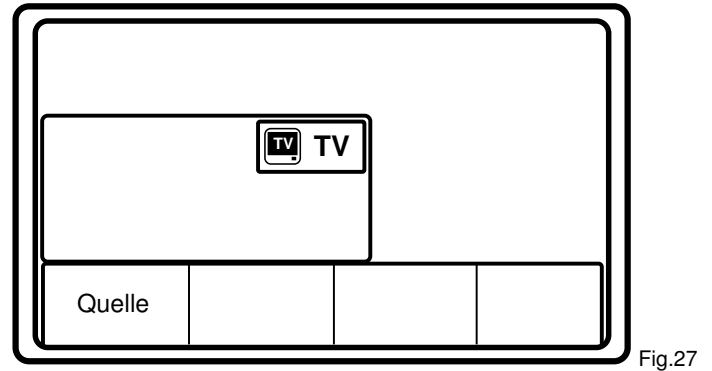
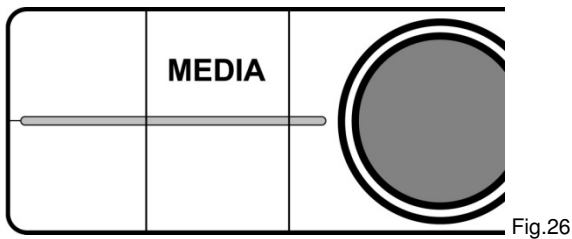


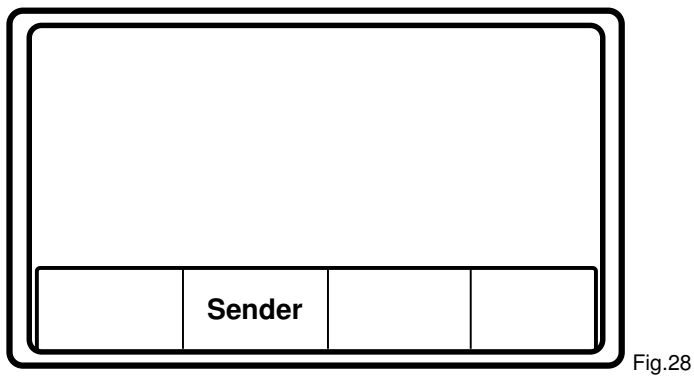
Fig.25

Start up

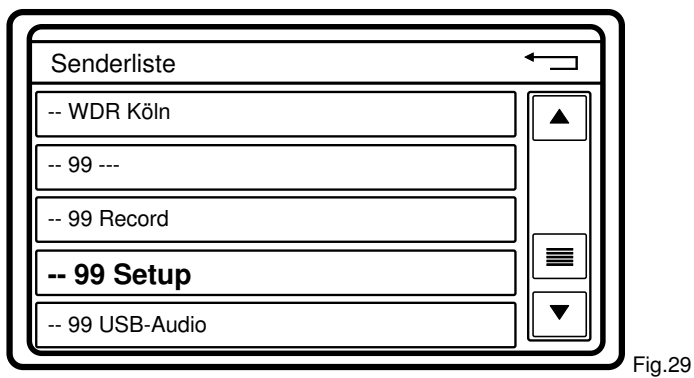
1. Push the **MEDIA** button – **TV-Tuner** needs to be selected (Fig. 27).



2. Select **CHANNELS >...**



3. Scroll down to...**99 SETUP** > selecting



Select menu **CHANNELS** again >...

4. Select **REGION & LANGUAGE** >

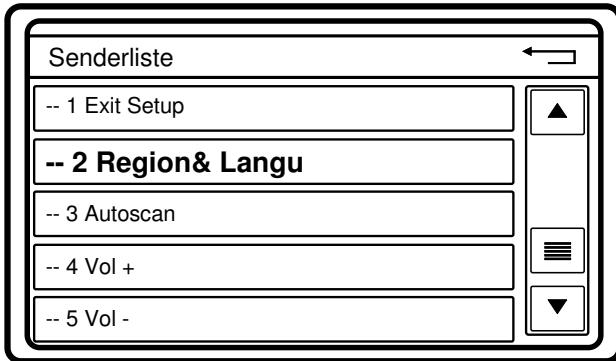


Fig.30

Select menu **CHANNELS** again >...

5. Select **REGION** (e.g. GERMANY)

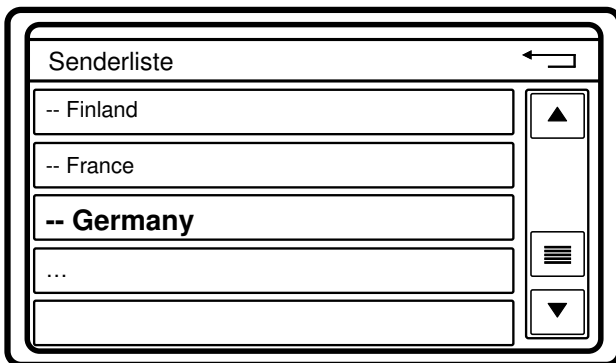


Fig.31

Select menu **CHANNELS** again >...

6. Select **LANGUAGE** (e.g. GERMAN)

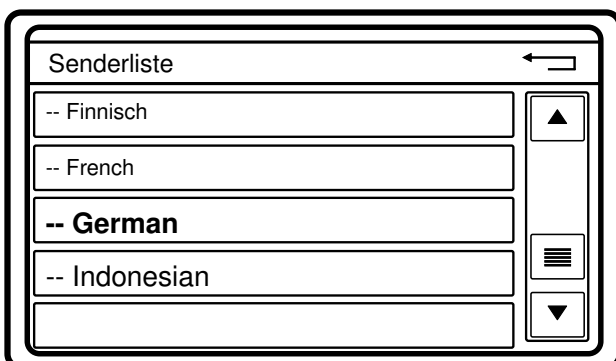


Fig.32

Select menu **CHANNELS** again >...

7. Select **99 SETUP** >

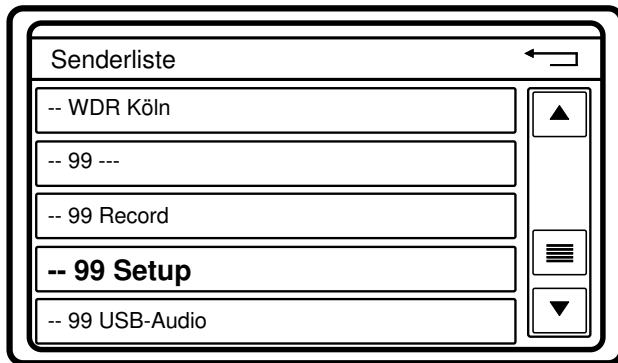


Fig.33

Select menu **CHANNELS** again >...

8. Select **AUTOSCAN** >> Search will start automatically

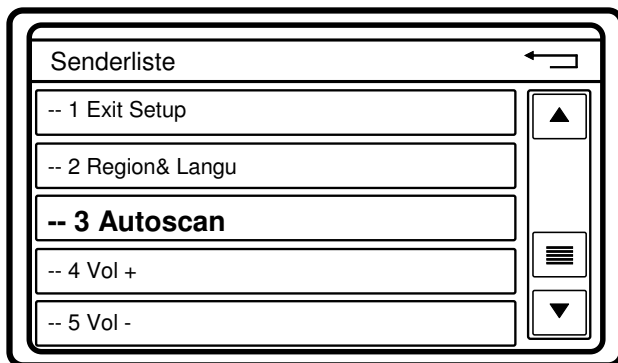


Fig.34

When auto search has finished the system will switch to the first channel.

Select menu **CHANNELS** again >...

9. Select **99 SETUP** >

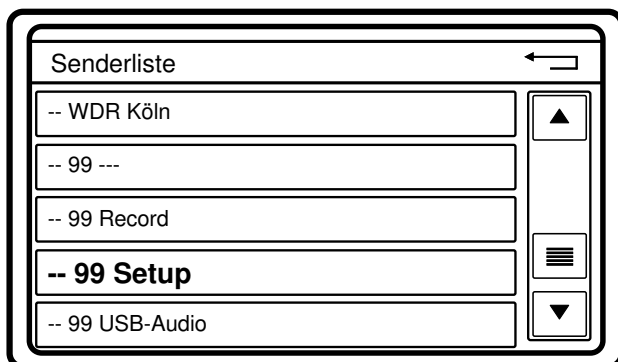


Fig.35

Select menu **CHANNELS** again >...

10. Select **VOL +** > Set the volume to the same level of the radio or other sources of the vehicle.

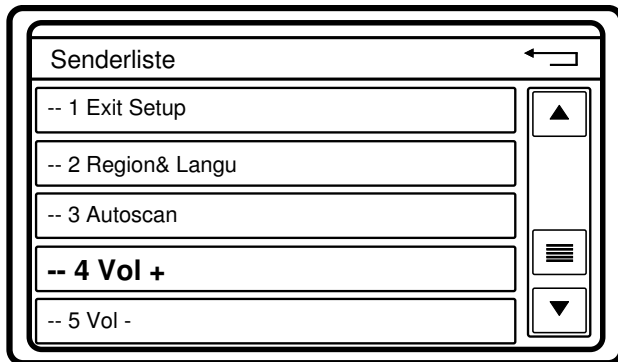
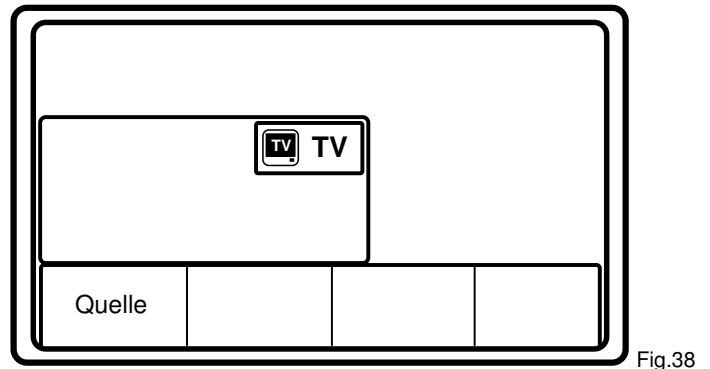
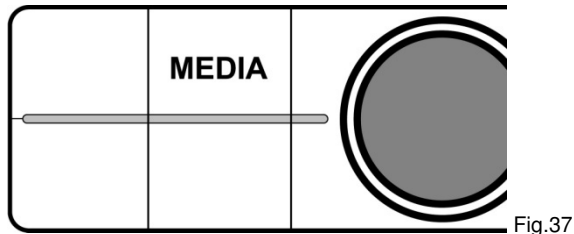


Fig.36

Leave the settings through the menu **EXIT SETUP**.

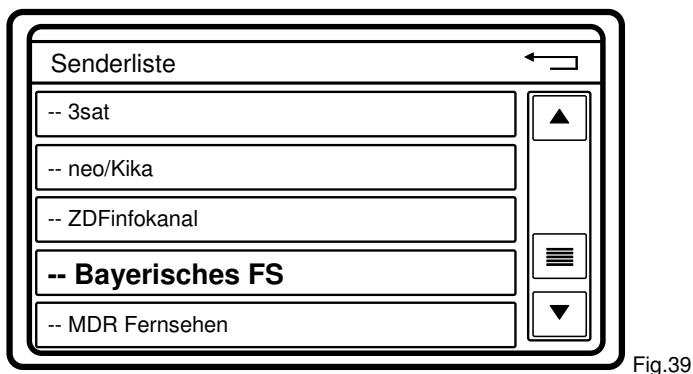
Operation instruction RNS 850

Push the **MEDIA** button – **TV-Tuner** needs to be selected.



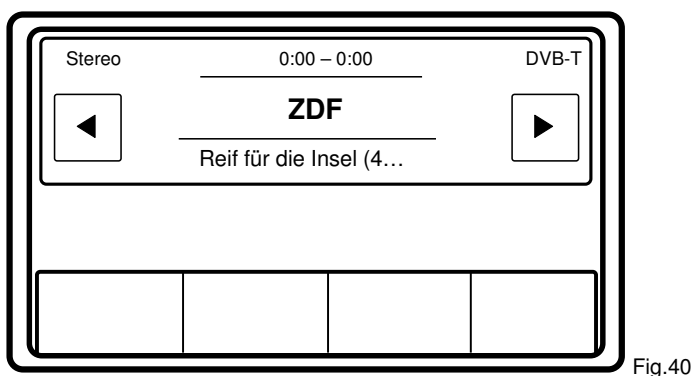
Channel list

Single channels can be selected of the channel list by using the knob or touch screen.



Manual channel selection

While using the knob or touch screen icons ◀ ▶ you can switch between the single channels.



TV Recording

USB-memory/ HDD (FAT 32) needs to be connected to the USB connection.

Select TV channel list > scroll down to > **99 RECORD**

> Select **99 RECORD** in order to **START** recording. During recording a **REC** symbol will be displayed.

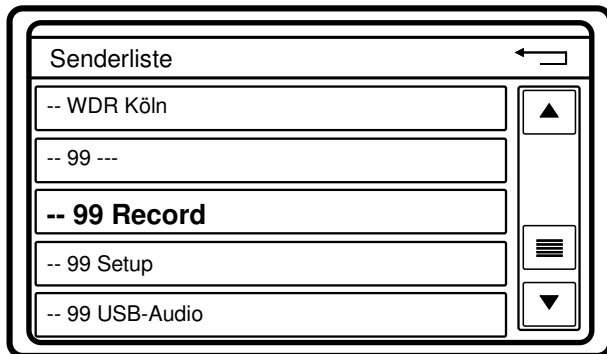


Fig.41



Fig.42

Select **99 RECORD** again in order to **STOP** recording. The record will be stored within directory **RECORDED_TV**.

Playing TV records

Select channel list > scroll down to > **99 USB-VIDEO** > selecting

Select menu **CHANNELS** again >...> Select directory **RECORDED_TV** ... >

Select menu **CHANNELS** again >...> Select the recorded file you want to play

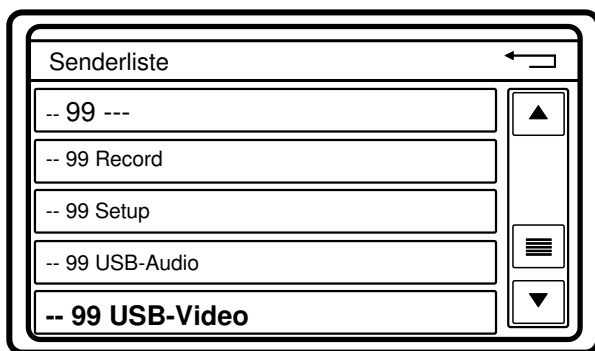


Fig.43

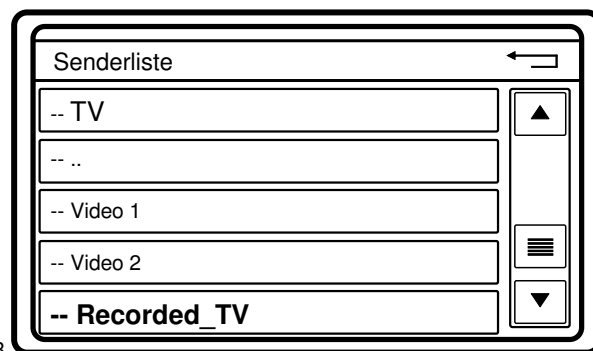


Fig.44

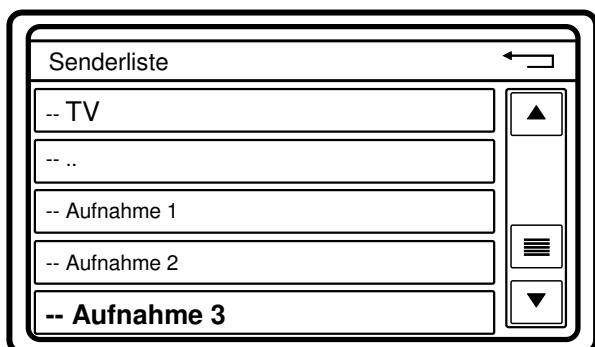


Fig.45

Store TV channels as a favorite

Select the suitable channel and press the button **STORE** > select **STORE** „Channel“.

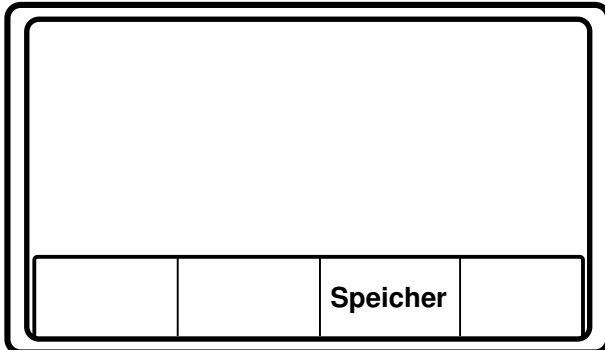


Fig.46

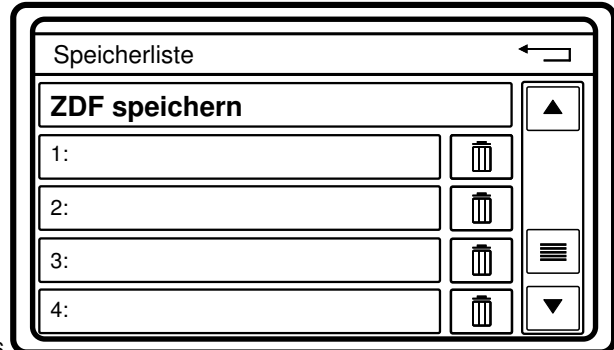


Fig.47

While using the knob select a suitable position.

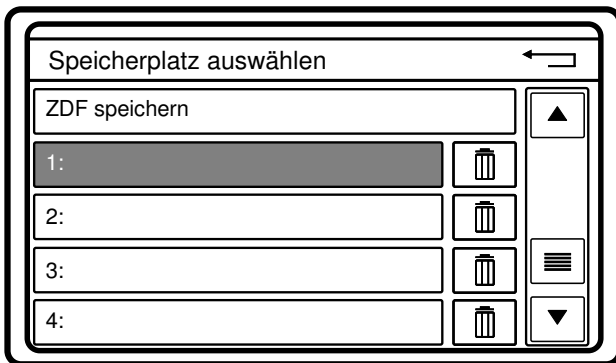



Fig.48

Delete TV channels

Select the channel you want to delete > push the trash button > 

Confirmation for final deleting.

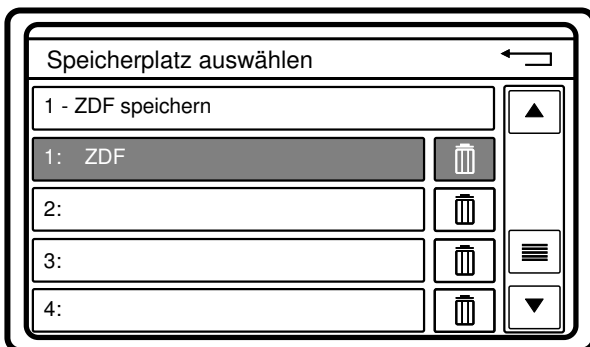


Fig.49

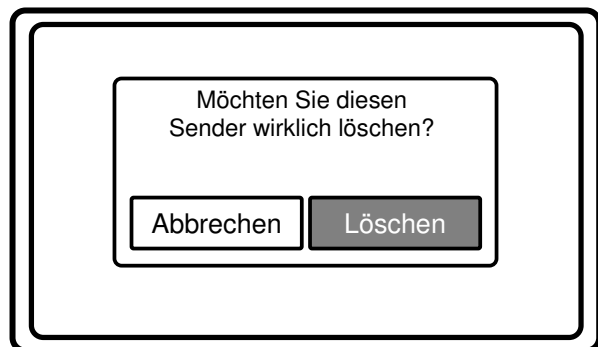


Fig.50

Videotext

While watching TV press **EXTRAS > VIDEOTEXT** . Select a teletext site by using the knob.

- Turning **SLOW** – Teletext will switch in single numbers
- Turning **FAST** – Teletext will switch in numbers of 100

NOTE: You are not able to enter teletext numbers.

Zoom function not supported

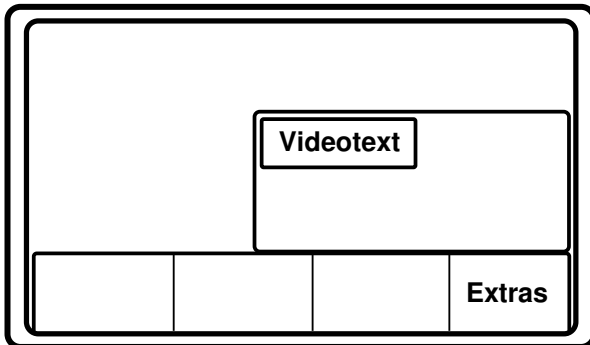


Fig.51

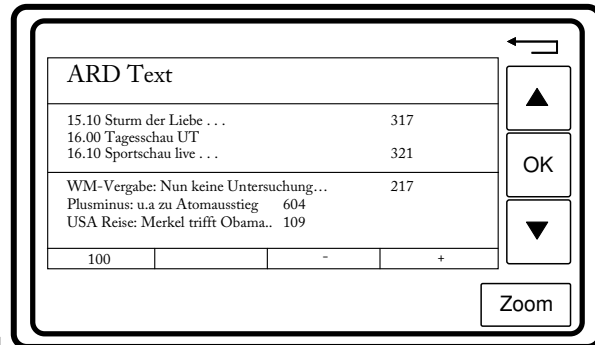


Fig.52

EPG Electronic Program Guide

While watching TV press **EXTRAS > EGP**.

NOTE: The display of EPG information could take a while. The channels will be refreshed step by step. EPG information can only be displayed if available.

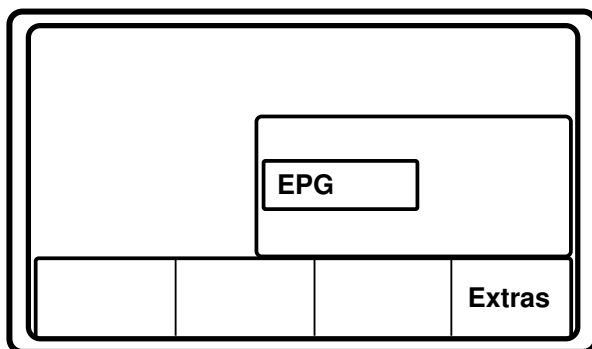


Fig.53

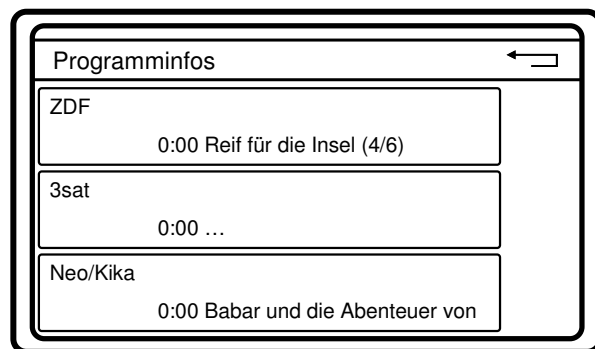


Fig.54

MP3 Music

USB-memory/ HDD (FAT 32) needs to be connected to the USB connection.

Select channel list > scroll down to > **99 USB-AUDIO** > selecting

Select menu **CHANNELS** again >...

Select **DIRECTORY** or **MUSIC FILE** for playing.

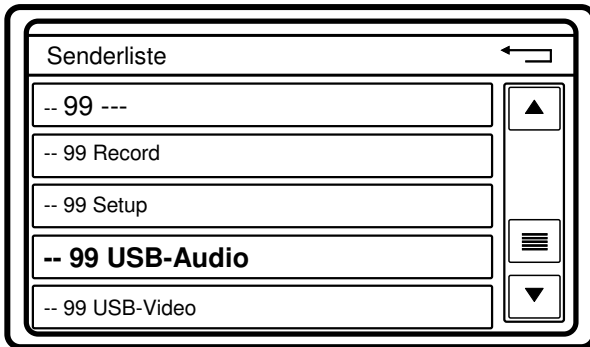


Fig.55

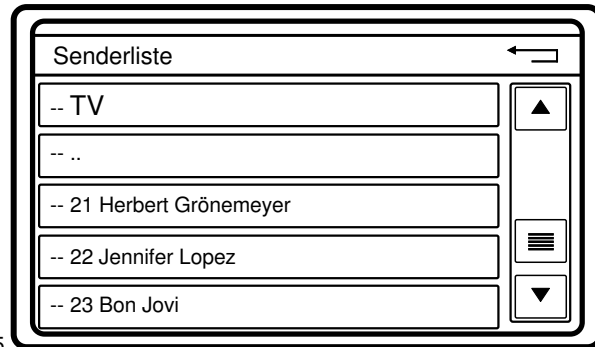


Fig.56

NOTE: With menu **..** you will step back to the previous directory.

Display of track information as well as interpret.



Fig.57

Manual selecting of music files

While using the knob or touch screen icons ◀ ▶ you can switch between the **next** or **previous** music file.



Fig.58

Music fast forward/ fast backward

While listening to the music select **EXTRAS > MANUELL**. While using the knob the needed speed can be selected.

2x – 4x – 8x – 20x

NOTE: For coming back to the usual speed the knob needs to be turned once (1x) to the opposite direction.

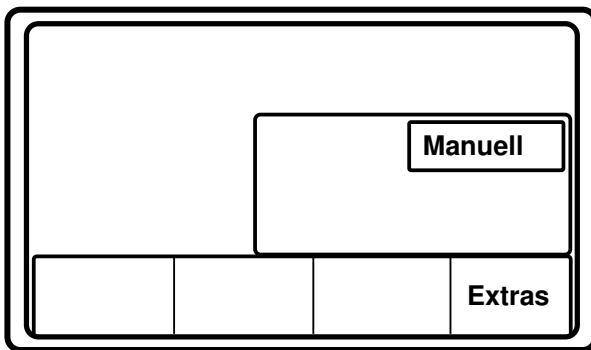


Fig.59

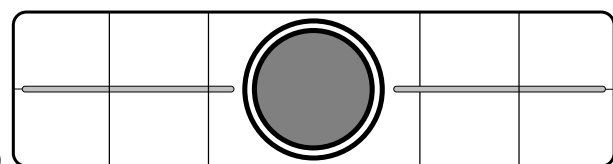


Fig.60

For leaving the forward backward mode the button **MANUELL** needs to be selected again.

While using the knob or touch screen icons ◀ ▶ you can switch between the **next** or **previous** music file again.

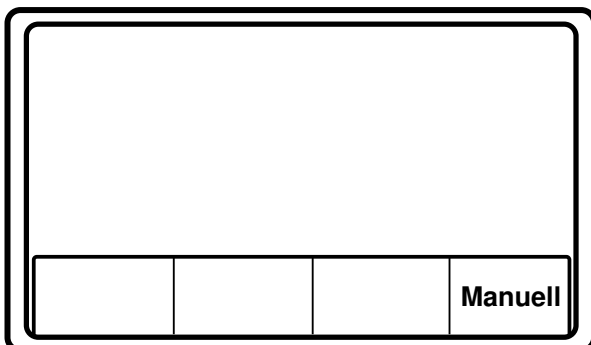


Fig.61

Video

USB-memory/ HDD (FAT 32) needs to be connected to the USB connection.

Select channel list > scroll down to > **99 USB-VIDEO** > selecting ... >

Select menu **CHANNELS** again >...

Select **DIRECTORY** or **VIDEO FILE** for playing.

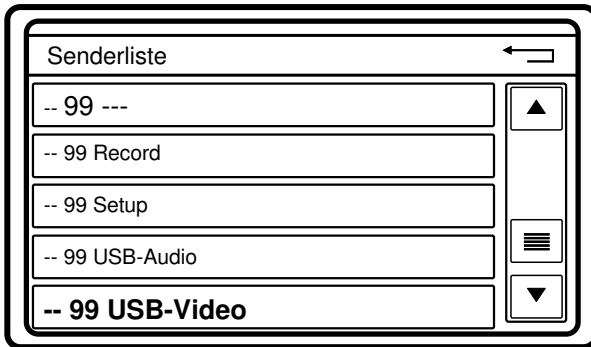


Fig.62

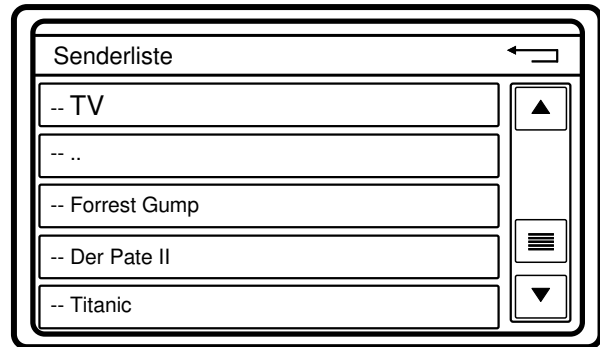


Fig.63

NOTE: With menu .. you will step back to the previous directory.

Manual selecting of video files

While using the knob or touch screen icons ◀ ▶ you can switch between the **next** or **previous** video file.

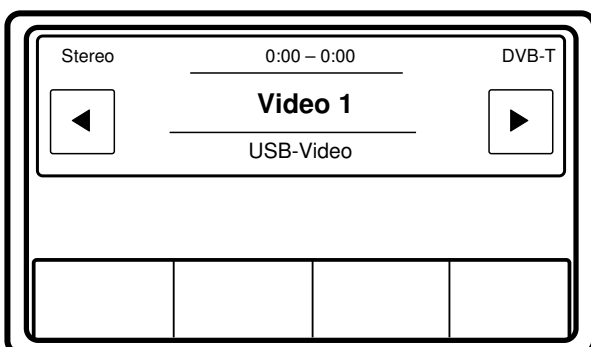


Fig.64

NOTE: Only video files within the same directory can be selected.

Video fast forward/ fast backward

While listening to the music select **EXTRAS > MANUELL**. While using the knob the needed speed can be selected.

2x – 4x – 8x – 20x

NOTE: For coming back to the usual speed the knob needs to be turned once (1x) to the opposite direction.

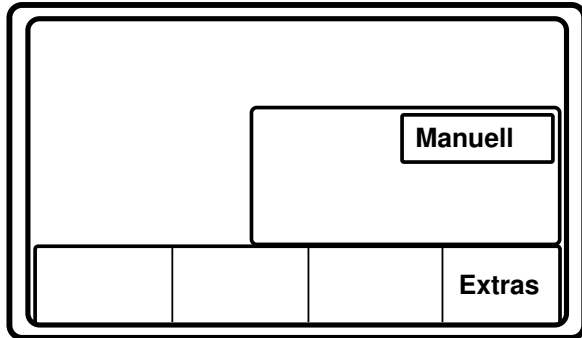


Fig.65

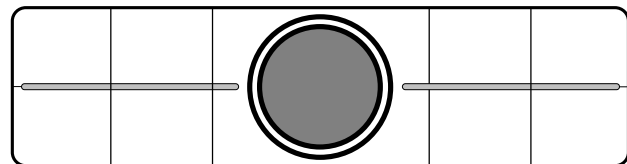


Fig.66

For leaving the forward backward mode the button **MANUELL** needs to be selected again.

While using the knob or touch screen icons ◀ ▶ you can switch between the **next** or **previous** video file again.

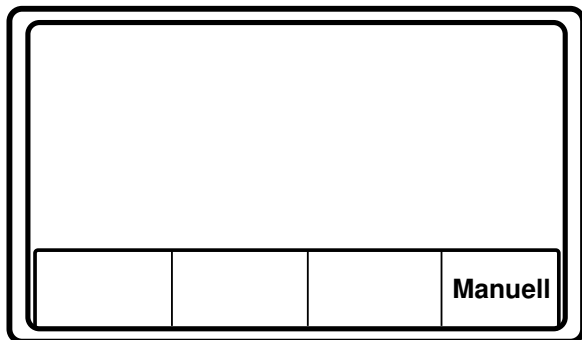


Fig.67

Settings

Within the TV mode press **EXTRAS > DISPLAY**.

The following settings can be done

Brightness/ Contrast/ Color

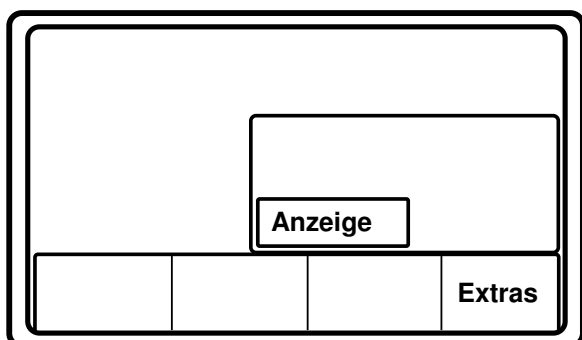


Fig.68

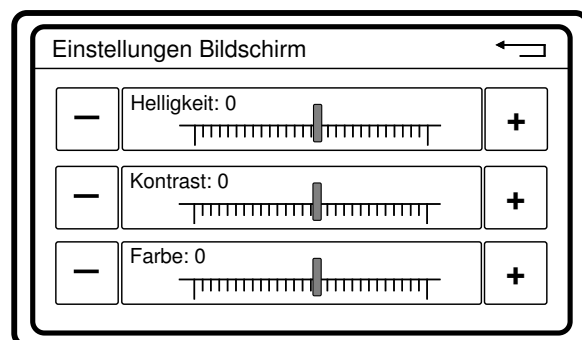


Fig.69

Setup

Select channel list > scroll down to > **99 SETUP** > selecting

The following settings can be done.

Region & Language – Selecting region + language

Autoscan –search for available channels

Vol+ – volume up

Vol- – volume down

Aspect Ratio – selecting picture size

Reset – restart of the FISCUBE device

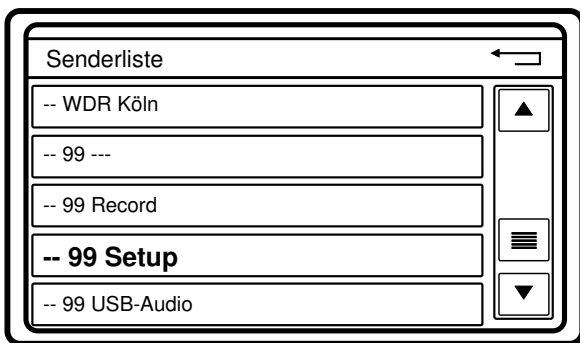


Fig.70

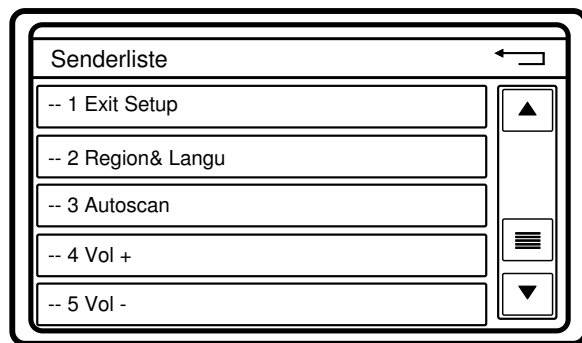


Fig.71

Aspect Ratio

In case the image is cut please select the menu **99-SETUP > ASPECT RATIO** and choose the suitable picture size (available from FISCUBE software-Index 1.17).

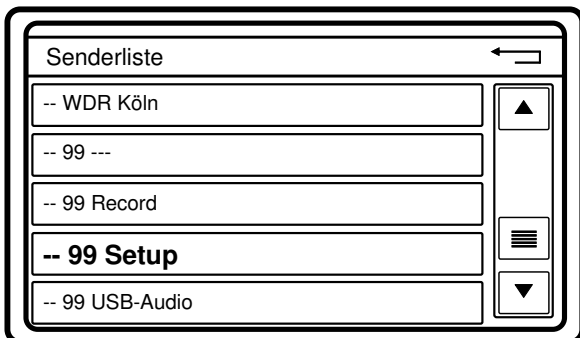


Fig.72

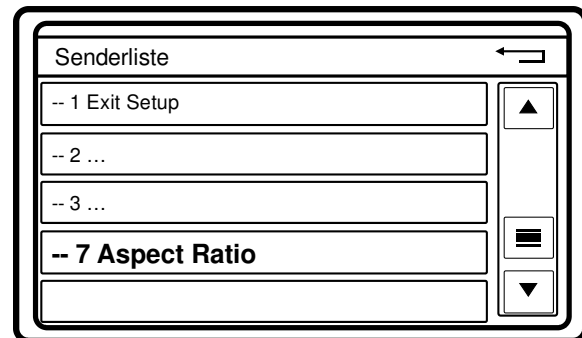


Fig.73

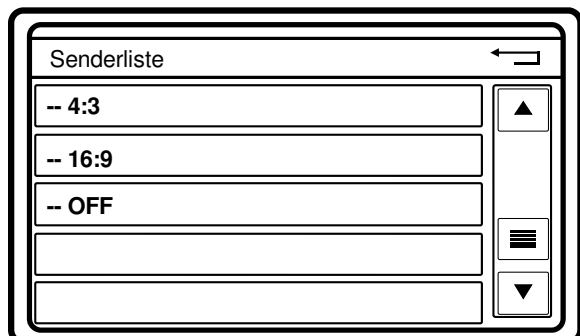


Fig.74

Video output

For connecting to additional screens within the vehicle:

e.g. Head rest screens, Overhead screens

NOTE: No processing of audio signals – ONLY VIDEO signals

Join the adapter article-ID. **38392** with the FAKRA video loom of the FISCUBE wiring.

The RCA connector can be connected to an additional screen.

NOTE: Depending on the number of additional screens a video booster may be required.

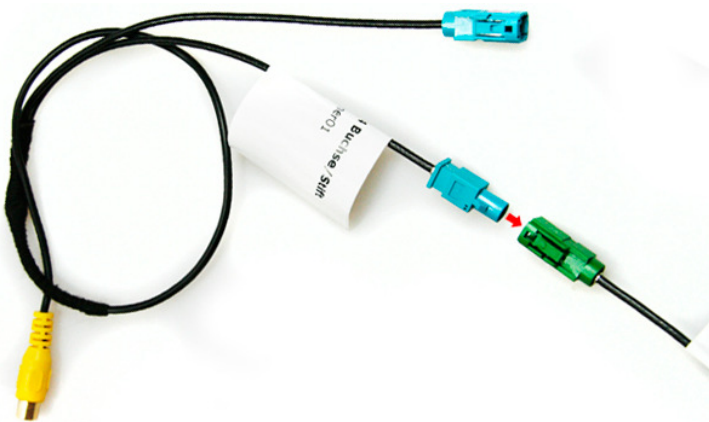


Fig.75