Installation instruction
Multimedia Adapter
BMW F-Series

Article no: 38974

BMW F-Series with Navigation Professional CIC

Contents

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.

Therefore please read with great care and completely this operating manual and store it appropriately!

For your safety all our products pass through a 100% control check.

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 warranty claims as well as the operating permissions become 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) self-made repairs on the device
>
> 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.

Please limit the failure search to ca. 0,5 hour for the mechanical resp. 1.0 hour for electric labors during the assembly or functioning problems.

To avoid unnecessary additional expenses please send immediately an inquiry to our technical support using the Kufatec form (http://www.kufatec.de/shop/de/infocenter/).

Please provide always the following information:

- chassis number
- part number of the add-on kit
- exact description of the problem
- already executed labor

Safety instructions

The installation can be executed only by trained qualified personnel. Before the installation disconnect the power supply. Therefore cut off the battery from the vehicle electric system, follow the manufacturer's specification.

- *Never use bolts, screws and other fastening elements from car's safety devices or steering wheel, brakes because it may influence your driving safety and cause accidents.*

- *Connect the device only to a 12V vehicle voltage with chassis ground to the car body. This unit cannot be used in large trucks or other vehicles which use a DC 24 V battery wiring system voltage.*

- *Avoid to install the device in places where it could hinder the safe driving or functional efficiency of the other units installed in the vehicle.*

- *This unit is only for the use with the following vehicles and model line; Only connections described within this instruction manual are allowed or required to use for installation.*

- *For damage impact caused by faulty installation, unsuitable connections or assembling in inappropriate vehicle types or models Kufatec GmbH &Co.KG assumes no liability.*

- *We advise you that these units process data out of the MOST protocol from the vehicle. During the assembly of this unit we as supplier have access to a specific model and we as producer don't know the overall system you work with.*

- *Especially in case of changes within the same model line and the same model year we don't guarantee the usability of our products. In case of the usability of our products with the manufacturer's changes Kufatec GmbH assumes no liability.*

- *Kufatec GmbH assumes no liability that the assembly of the unit described in this manual is approved according the warranty regulations of the single car manufacturers. Please check your manufacturer's conditions and warranty before you begin the installation.*

- *Kufatec GmbH reserves the right to change the device specification without further notice.*

- *Errors and changes excepted.*

CAUTION: Your concentration on the road traffic has to be of top priority. The operation of the system should take only place, when the traffic, weather and road conditions allow it. Choose the sound volume so that you are still able to notice the warning signals from the street (fire brigade, police).

References of legal regulations for operation

Use this unit in the intended domain only.

If you use the unit in a foreign domain, if the unit is not installed properly, or if the unit will be reconstructed the operating permit and warranty will expire.

Multimedia Adapter

- Uncomplicated assembly, no cutting of the existing wires is necessary
- All the standard functions remain fully intact
- Operation through the iDrive operation unit (only with Interface Version „Plus")
- **Audio output** through the speaker of the vehicle – no installation of additional speakers necessary

NOTE: Before the installation check, whether the vehicle is equipped with adapters of different brands. If there is assembled another interface than developed by Kufatec GmbH & Co. KG, so the trouble-free function of the multimedia adapter cannot be guaranteed. Respectively the interface of a different brand has to be removed from the vehicle.

NOTE: Light conductor must not be BENT or BROKEN! The recommended laying radius amounts to 40mm.

Faulty installation can result in higher cushioning and run-time differences. In such case the trouble-free functioning of the multimedia adapter cannot be guaranteed.

NOTE: End device installation

The installation of end devices is foreseen for the rear area of the vehicle. In case of the installation in the front area (e.g. DVD-Player) an additional AV wire will be necessary.

NOTE: In case of installation of **2** end devices (e.g. DVD Player + DVB-T) an Y-junction (Kufatec article no.35551) has to be used, in order to connect both control wires (fig. 1).

Fig. 1

Optional accessory

Article no.: 35601 – jack junction for the parallel connection of the control wire + remote control receiver

Article no.: 36482 – western junction for the parallel connection of the control wire + remote control receiver

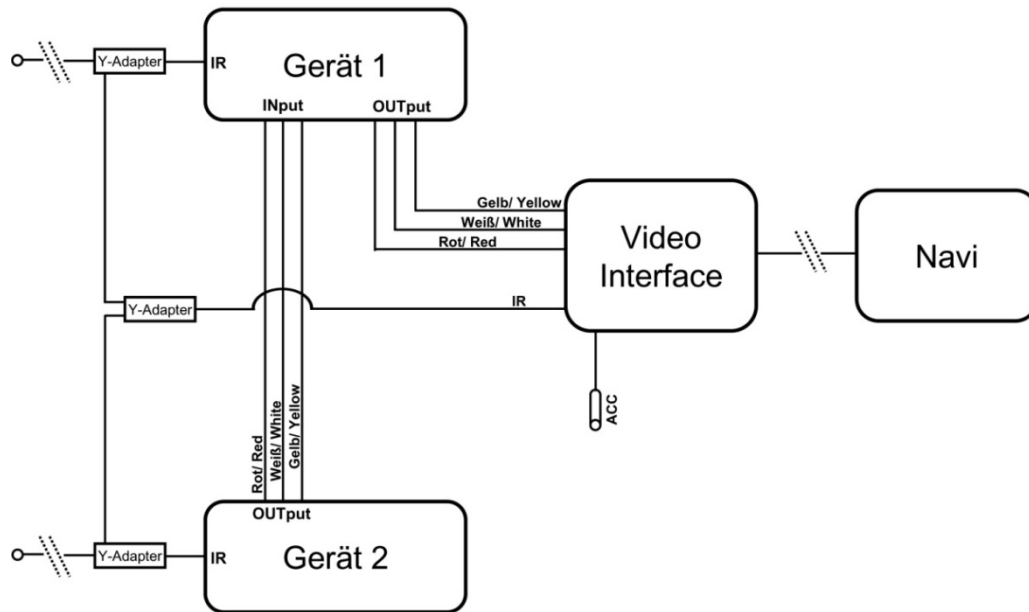Article no.: 37613 – AV cable (extension) 550cm

Connection diagram

Fig. 2

ACC (Blue) –   Connect with the ACC wire (remote) of the end device (DVD/ DVB-T)

If the end device is not equipped with an ACC wire, so the ACC wire of the interface remains without any function in the vehicle.

⚠ **CAUTION: DO NOT** connect the cable for the power supply (DVD/ DVB-T) to ACC cable of the interface! It could **destroy** the video interface!

This cable has to be additionally secured by a 1 ampere fuse.

Device specific control wires

In order to realize the operation of the end devices by means of MMI operation unit (only for Plus Version) you need a device specific control wire (see table).

End device	Kufatec Article no.	End device	Kufatec Article no.
DVD Player Ampire DVX 101	35550	DVB-T Ampire DVBT 52	35549
DVD Player MP 410U	35550	DVB-T Ampire DVBT 200	35549
DVD Player BOA 85700	35550	DVB-T Ampire DVBT 400	35549-1
DVD Player AIV Car DVD Player	35550	DVB-T Alpine TUE-T150DV	35547
DVD Player DVD 145	35552	DVB-T Dietz 1491	35553
DVD Player 500 U	35550	DVB-T Dietz 1492	36923
DVB-T Zemex D90-2G	38265	DVB-T DAS M21	38400
DVB-T Zemex D100	35549-1	iPod Video Interface Alpine KCE 425i	35552
DVD Changer Zemex DVC62	38505		

Notes

NOTE: It is not necessary to visit a BMW dealer after the installation. The final adaptation to the vehicle will be executed full automatically by means of the **Diagnosis Interface Article no. 39037**.

NOTE: **Light conductor must not be BENT! The recommended laying radius amounts to 40mm.** Faulty installation can result in higher cushioning and run-time differences. In such case the trouble-free functioning of the multimedia adapter cannot be guaranteed.

NOTE USB index structure: You can create up to 95 entries in the root index. Each of these entries can include in turn up to 95 entries. The entries consist of single files and indices as well.

Assembly time

An experienced mechatronics technician needs about 5 hours for the complete installation.

Scope of delivery

- Multimedia Adapter LWL
- Cable harness

Installation instructions

Dismantling of the dash board blind. The blind is fastened on 7 spots.

1er – F20

3er – F30

5er – F07, F10, F11

7er – F01

Fig.1

Fig.2

Carefully lever the blind out of its frame using a suitable tool (dismantling wedge – in order to avoid damage).

Fig.3

Fig. 4

Loosen the screws of the front blind (air condition control unit) – disconnect the original plug connections – take out the air condition control unit.

Fig. 5

Fig. 6

Loosen the necessary screws of the radio navigation unit – disconnect the original plug connections – carefully pull out the unit.

Fig. 7

Fig. 8

X3er – F25

Dissembling of the blind underneath the radio unit. Carefully lever the ventilation nozzles out of the frame using a suitable tool (dismantling wedge – to avoid damage).

Fig. 9

Fig.10

Unscrew the bolts of the front blind (air conditioning control unit) – disconnect the original plug connections – take out the air conditioning control unit. Loosen the necessary screws of the radio – navigation unit – disconnect the original plug connections – carefully pull out the unit.

Fig. 11

Fig. 12

Interface connection

Light conductor

Pull the Quadlock plug out of the navigation unit. Remove the light conductor.

Fig. 13

Fig. 14

Plug the delivered housing to the just removed (original) light conductor. Connect the original light conductor plug with the socket of the delivered cable harness.
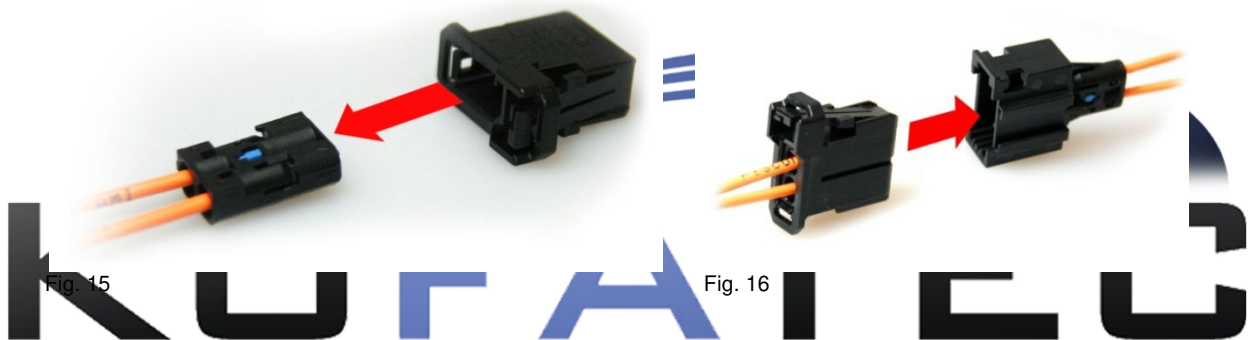
Fig. 15

Fig. 16

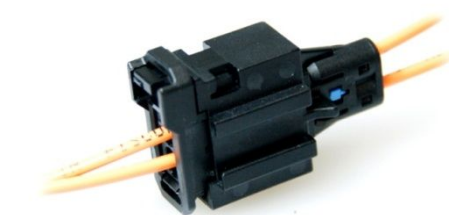Integrate the light conductor of the delivered cable harness in the Quadlock plug.
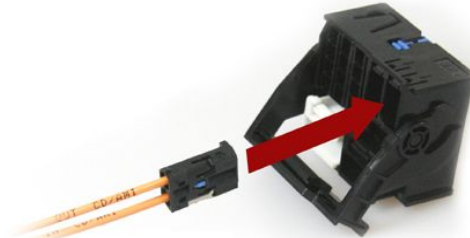
Fig. 17

Fig. 18

Connect the 18-pin plug and the light conductor plug to the Interface – remove the blind plug of the interface. The figure 19 shows the correct connection of the interface.
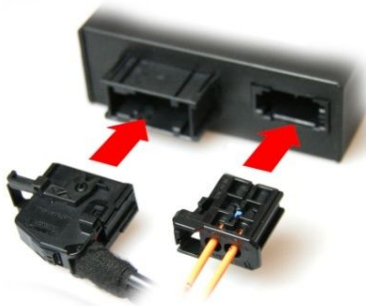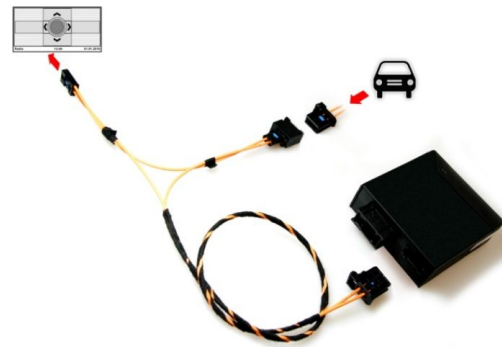

Fig. 19

Fig. 20

Video wire / Power supply

Pin the video wire into the Quadlock input on the vehicle:

PIN 19 – Transparent (video)
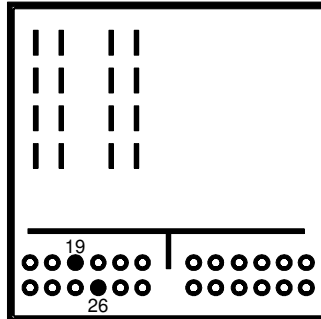
PIN 26 – Black (shielding)

Fig. 20

Fig. 21

The wires **brown (ground)** and **red (permanent positive)** have to be connected with a braze or a new crimp joint specific for the vehicle. **Do not use press- on connectors!**

BROWN – GROUND   RED – PERMANENT POSITIVE

⚠️ **NOTE:**   If the pins 19 and 26 are occupied then please remove the red and black wires. ⚠️

Connect the Audio – Video – and control wire to the delivered cable harness.

NOTE: The control wire is necessary only with the **Plus** Version.

Fig. 23

Fig. 24

Connect the **single blue wire** (fig. 24) **-** with the **ACC** wire of the end device (DVD/ DVB-T). FIRST check the connection notes of the end device (DVD/ DVB-T) which wire is the ACC! Establish a **correct press-on connection**.

If the end device is equipped with an ACC wire then the ACC wire remains in vehicle without any function.

> ⚠ **CAUTION: DO NOT** connect the cable for the power supply (DVD/ DVB-T) to ACC cable of the interface! It could **destroy** the video interface!
>
> This cable has to be additionally secured by a 1 ampere fuse.

NOTE: The installation has to be completed before the coding by means of diagnosis interface can be executed. The coding adapter is applicable for just one vehicle only. It means during the first usage it stores the chassis frame number and another vehicle details.

The interface is equipped with an **LED whereby the** status of the diagnosis interface is indicated.
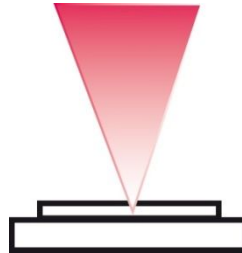

Fig. 25

Fig. 26

1. After the installation check the connections again.

2. **Switch on the ignition** – wait another 30 seconds – plug the interface in the diagnosis interface of the vehicle.

Fig. 27

3. As soon as the coding has started the **LED illuminates permanently**. As soon as the **LED** goes off the coding is completed. Depending on the vehicle the coding can last up to 1 minute.

NOTE: **AS SOON AS THE INTERFACE IS INSERTED (LED ILUMMINATES) IT MUST NOT BE REMOVED BEFORE THE CODING IS COMPLETED.**

LED state	Status
LED illuminates permanently	Coding is completed
Slow flashing of the (Sec.-Tact)	Interface is locked and may not be used
Fast flashing of the LED	Failure occurred – Interface may be used again

4. **Remove** the diagnosis **interface**.

Fig. 28

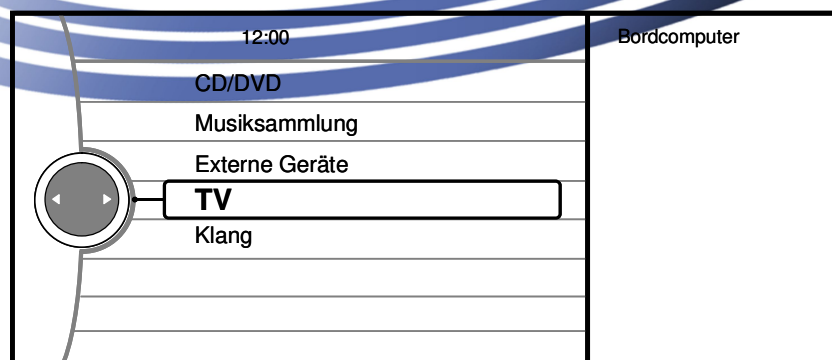5. Select the **CD/MULTIMEDIA** source – the **TV** option is now available

Fig. 29

⚠ **NOTE:** Store the dongle in the vehicle together with the other vehicle documentation.

Setup Video Interface C14IC

1.
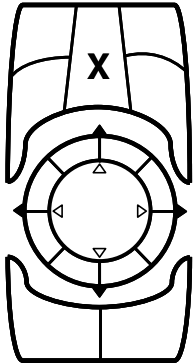After pressing the **MENU** key – select the **CD/MULTIMEDIA** source.

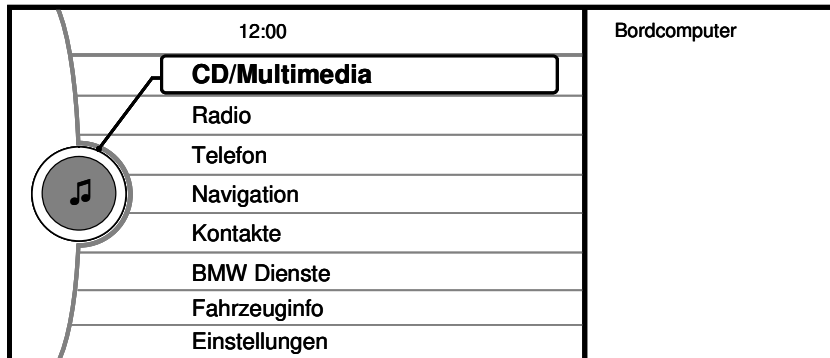|	
12:00	Bordcomputer
CD/Multimedia	
Radio	
Telefon	
Navigation	
Kontakte	
BMW Dienste	
Fahrzeuginfo	
Einstellungen	

Fig. 30   Fig. 31

2.
Select the **TV-Tuner** source.

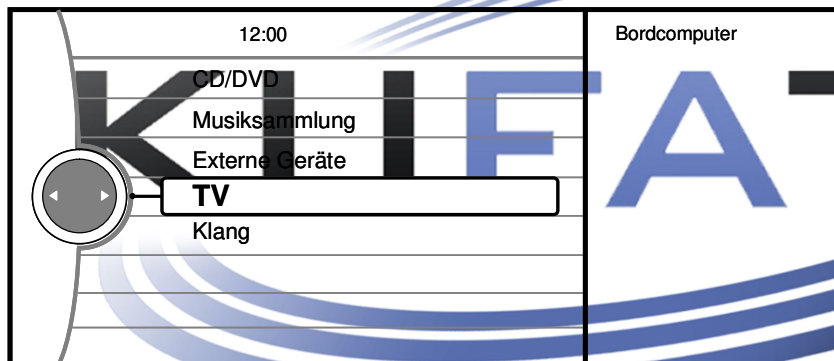|	
12:00	Bordcomputer
CD/DVD	
Musiksammlung	
Externe Geräte	
TV	
Klang	

Fig. 32

3.
Select the menu item **ALL PROGRAMS**.

Alle Programme

Fig. 33

4.
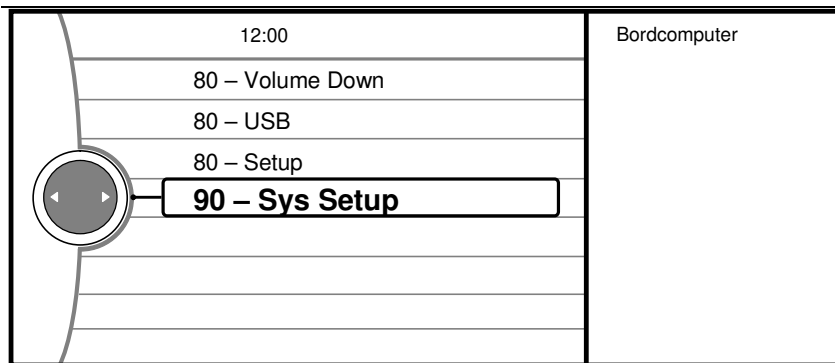By means of the **control dial** select the menu item **90 - SYS-SETUP**.

12:00		Bordcomputer
80 – Volume Down		
80 – USB		
80 – Setup		
90 – Sys Setup		

Fig. 34

ONCE AGAIN select the control dial >…

12:00		Bordcomputer
Config:		
1C00		
1C01		
1Cxx		
2C00		
2C01		
2Cxx		

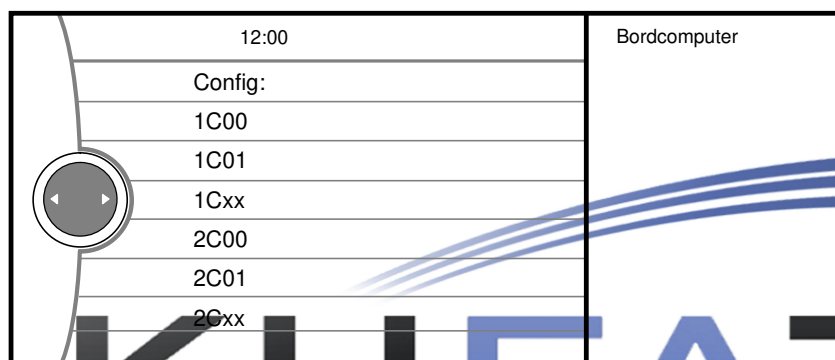Fig. 35

5. Set the number of the devices to be controlled

1C: Configuration **Single or Dual control system**

> **1C00:** Control of **ONE** end device – dual control system is deactivated
> The end device has to be selected through the menu item **2C**
> In case of control system of **TWO end devices** in the menu item **1C01** till **1Cxx** select the device for the first control (see table).

2C: Selection of the devices of the **dual control system**

> Selection of the end devices through the menu item from **2C00** to **2Cxx**

NOTE: By means of the control dial define the particular end devices.

The sign * symbolizes the actual configuration. In case of only one device first you have to define **1C00** before the end device will be selected by means of **2Cxx.**
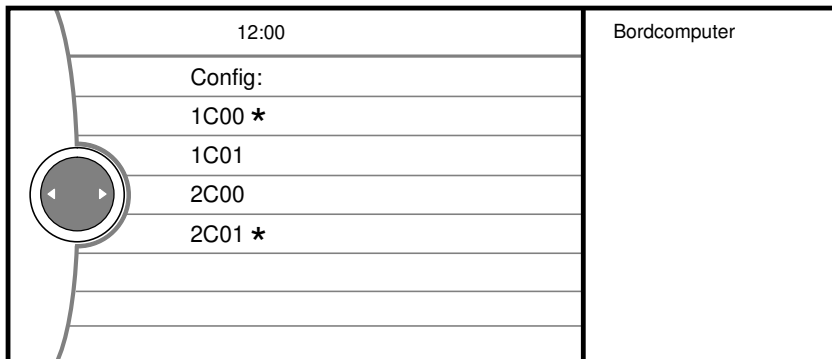
Configuration examples

1 End devices

```
                    12:00              Bordcomputer

            Config:

            1C00 ✱

            1C01

    ◄   ►   2C00

            2C01 ✱


```
Fig. 36

2 End devices

```
                    12:00              Bordcomputer

            Config:

            1C00

    ◄   ►   1C01 ✱

            2C00

            2C01 ✱


```
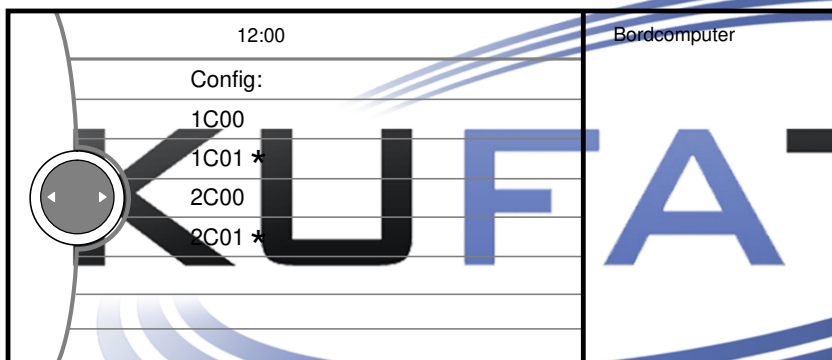Fig. 37

ONCE AGAIN actuate the control dial >…

6. **Save the settings** – select the menu item **SAVE** in order to save the executed settings

```
                    12:00              Bordcomputer

            2C09

            2C10

    ◄   ►   2C11

          ┌─────────────────────┐
          │ 90 – Save           │
          └─────────────────────┘


```
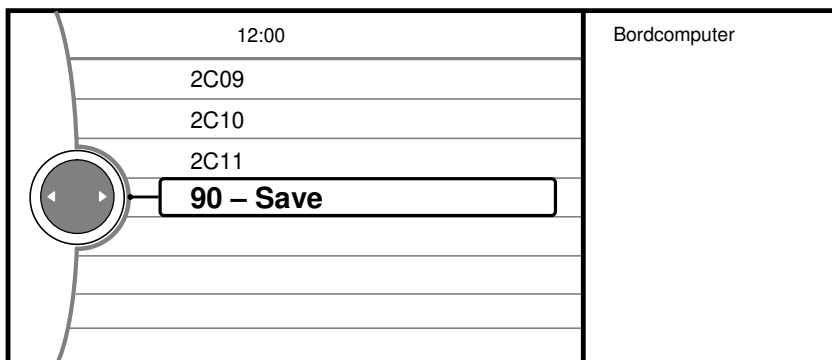Fig. 38

ONCE AGAIN actuate the control dial >…

7.

Volume setting – select the menu item **VOLUME UP**. Press the control dial so often, until the sound volume of the end device is set on maximum.
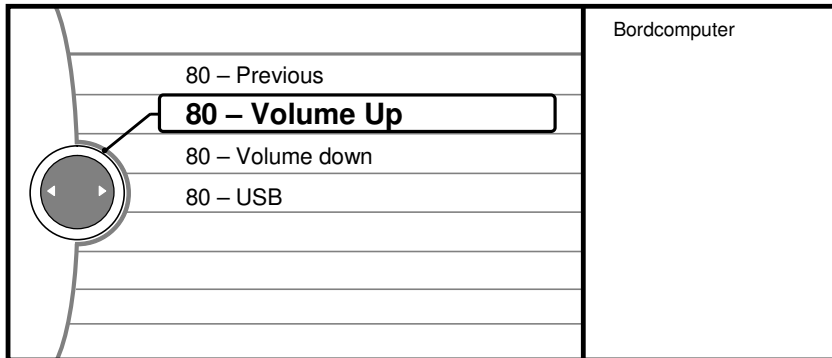

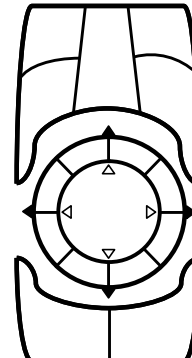|	Bordcomputer
80 – Previous	
80 – Volume Up	
80 – Volume down	
80 – USB	

Fig. 39

Fig. 40

NOTE: In case of the „Basic" type interface the volume has to be set by means of the remote control of the end device.

NOTE: For a higher operation comfort the installation of an additional infrared receiver of the remote control is recommended.

Selection possibilities of the end device

1Cxx

1C01 – DVD Player Ampire DVX101

DVD Player MP 410U

1 C02 – DVD Player AIV Car DVD Player

DVD Player BOA 85700

1C03 – DVD Player DVD145

DVD Player 500U

1C04 - DVB-T Alpine TUE-T150DV

1C05 – DVB-T DAS M21 (from Interface SW 1.13)

1C06 – DVD changer Zemex DVC62 (from SW 1.18)

2Cxx

2C01 – DVB-T Dietz 1492/ 1493

2 C02 – DVB-T KTC dual3000

DVB-T Dietz 1491

2 C03 - DVB-T Ampire DVB-T 200, 400 2G/ 3G

2 C04 – DVB-T Ampire DVB-T 52

DVB-T Zemex DVB-T 100

DVB-T Bullit HD 4G

DVB-T ASUKA ARA-HD

DVB-T Ampire 55-HD

2 C05 – DVD Player Ampire DVX101

DVD Player MP 410U

2 C06 – iPod Video Interface Alpine KCE 425i

2 C07 – DVD Player AIV Car DVD Player

DVD Player BOA 85700

2 C08 – DVD Player DVD145

DVD Player 500U

2 C09 – DVB-T Alpine TUE-T150DV

DVB-T Alpine TUE T200

2 C10 – DVB-T Zemex D90-2G

2C11 – DVD Player DVD500U

2C12 – DVB-T DAS M21 (from Interface SW 1.13)

2C13 – DVB-T HD-DVB-T

2C14 – DVD changer Zemex DVC62 (from SW 1.18)

Operation of the Video CIC Interface

NOTE: End device control is possible with the interface version **PLUS** only.

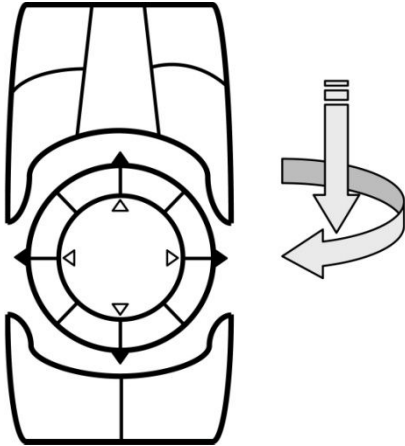The operation takes place via the keys of the iDrive control unit.

Fig. 41

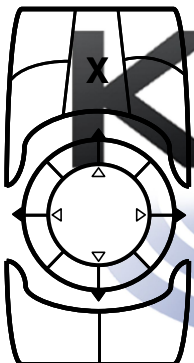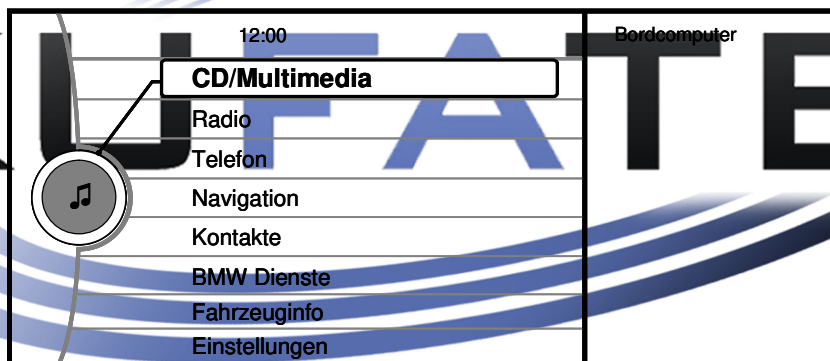After pressing of the **MENU** key select the **CD/MULTIMEDIA** source.

12:00	Bordcomputer
CD/Multimedia	
Radio	
Telefon	
Navigation	
Kontakte	
BMW Dienste	
Fahrzeuginfo	
Einstellungen	

Fig. 42   Fig. 43

Select the **TV-Tuner** source.

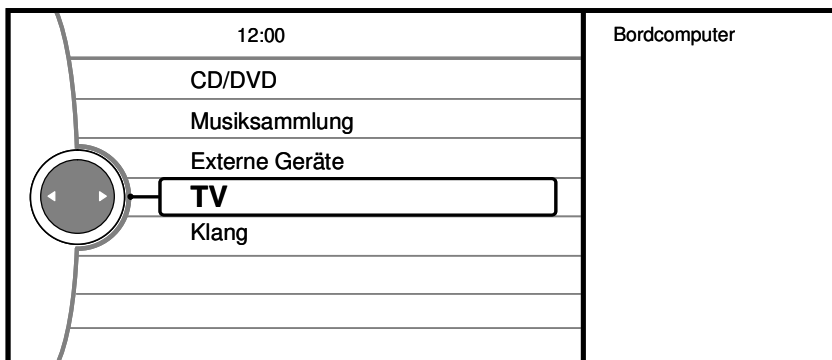| 12:00	Bordcomputer
CD/DVD	
Musiksammlung	
Externe Geräte	
TV	
Klang	

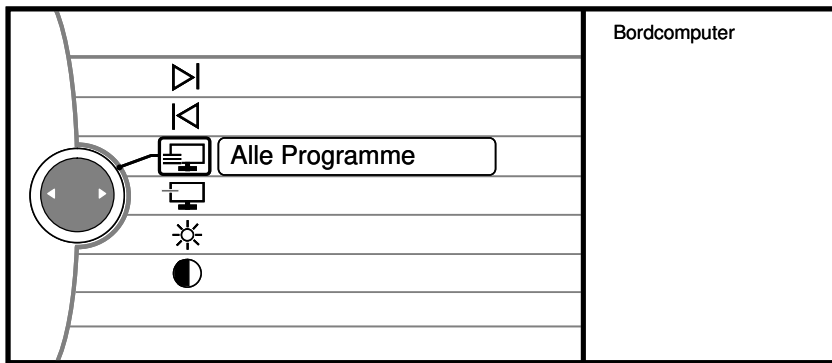Fig. 44

Select the menu item **ALL PROGRAMS**.

Fig. 45

Functions list

By means of the control dial the following functions of the particular end device (DVD resp. DVB-T) can be executed. – For detailed list see the table of the control functions.
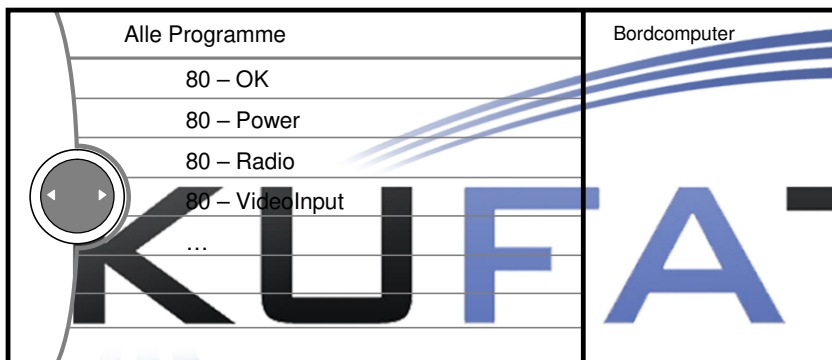

Fig. 46

Control functions

Display	Function description
80 – OK	OK-Key of the remote control
80 - Power	On/ Off
80 – Radio	Switching to the Digital Radio (possible in best. regions only)
80 – Video Input	Change between first and second device
80 – Search	Channel search
80 – Exit	Exit-Key of the remote control
80 – Up	Arrow-key on the top of the remote control
80 – Down	Arrow-key down on the remote control
80 – Left	Arrow-key left on the remote control
80 – Right	Arrow-key right on the remote control
80 – Next	Track forward
80 – Previous	Track back
80 – Volume Up	End device sound volume increase
80 – Volume Down	End device sound volume decrease
80 – USB	Selection USB source
80 – Setup	Menu-key of the remote control
90 – Sys. Setup	Configuration Multimedia Adapter