

GRUNDIG

CAR INTERMEDIA

A l l i x x

SCD 5410 DAB
SCD 5490 RDS

DEUTSCH

ENGLISH

FRANÇAIS

ITALIANO

PORTUGUÊS

ESPAÑOL

NEDERLANDS

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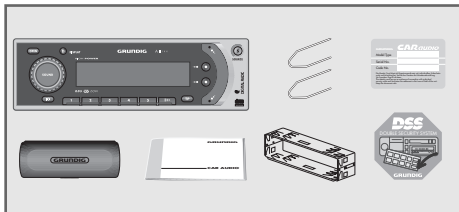
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Package contents



CAR AUDIO ALLIXX

Case for detachable control unit

Identity Card

DSS (Double Security System) sticker

Mounting frame

Two extendable brackets

Operating manual

Special features of your device

This high-quality car radio includes an integrated drive, changer control and high-power amplifier with 4 x 50 Watt music power.

The device is equipped with a dynamic FM RDS radio with EON and PTY functions for excellent reception.

Radio and CD texts can be shown on the dot matrix graphic display.

Anti-theft security

This car radio is equipped with a coding function and a removable control unit as protection against theft.

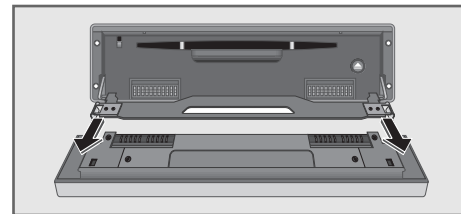
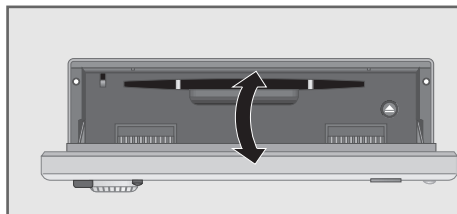
The Identity Card contains its type, serial number and code number for the coding function. The serial number is also stamped on the device frame.

Always keep the Identity Card somewhere where only you have access to it. If you lose the Identity Card, it can be replaced by an authorised dealer upon proof of ownership and payment of a fee.

Detaching the control unit

As an additional anti-theft measure you can also detach the control unit.

- 1 Press **OPEN**. The control unit swivels outwards.



- 2 Pull the control unit out of the bracket.
- 3 For safety reasons, always close the bracket again. Always keep the control unit in its case.

Installing the control unit

- 1 Open the control unit bracket.
- 2 Position the control unit on the front of the guides and slot it into the device.

Extended functions (EXPERT)

Press and hold down the **SOUND** button to select the special operating level which allows you to use functions beyond the basic range of settings (see page 13).

SAFETY INSTRUCTIONS

GRUNDIG Environmental Initiative

GRUNDIG has used no plastics for the packaging of your device. The packaging consists entirely of cardboard or paper and can be disposed of for waste paper recycling.

Fitting the device

We recommend that you have your device fitted by a specialist in order to guarantee trouble-free operation. Installation instructions can be found starting on page 17.

You need a special antenna to use the DAB frequency band.

Road safety

Familiarise yourself with the various functions of the device before you use it while driving.

Excessive volume can be dangerous to yourself and other road users. Therefore set the volume so that you can still hear outside noises such as car horns and police sirens. Set the volume using the volume knob.

Traffic announcements may be considerably louder than normal playback.

CD

Multimedia CDs not only contain audio tracks but also data tracks. If, despite the warning instructions, you play one of these CDs, it may produce noises at a traffic-endangering volume. It can also damage the device and the loudspeakers.

Laser

On the underside of your device there is a plate marked CLASS 1 LASER PRODUCT. This means that the laser is designed in such a way as to ensure that the maximum permissible emission value cannot be exceeded under any circumstances.

Coding

If the device is coded and then disconnected from the car battery it is electronically secure.

Cleaning

Only use a soft, anti-static duster to clean the front panel of the device. Polish and cleaning agents can damage the surface of the panel.

Technical data

The device complies with the EMC protection standards (EC directive 89/336 EEC, 92/31 EEC and 93/68 EEC) according to the EN 55013 and EN 55020 norms.



OVERVIEW

Controls



General

- ① **IO** On/off.
- ② **Volume regulator**
Changes the volume and the SOUND and EXPERT settings.
- ③ **SOUND**
Pressed briefly: selects the BASS, TREBLE, FADER and BALANCE sound settings.
Hold down to select the EXPERT function.
- ④ **SOURCE**
Selects DAB, FM, AM, CD or CD changer as the input source.
- ⑤ **OPEN**
Releases the control unit, which swivels outwards.

⑥ DISPLAY

For the display, you can choose between normal display, date and time, radio text or additional announcements (DAB).

Radio operation

- ⑦ The upper **soft key**
selects the »IS«, »SRC«, »MAN«, »PTY« and »SCN« operating modes.
- ⑧ The lower **soft key**
GO starts the IS or PTY search.
CLR deletes the selection and ends the function.
- ⑨ **Rocker switch**
Starts the selected function when activated in the EXPERT mode (page 13). Hold it down to call up secondary services (DAB).

⑩ **TP** Pressed briefly: activates the standby mode for traffic news.

⑪ 1, 2, 3, 4, 5

Memory buttons for stations, programme types and sound settings.

⑫ III

Changes the preset level.
Hold down to switch the AF (alternative frequencies) function on or off, or to switch the announcements on or off (DAB).

CD mode

- ⑦ The upper **soft key**
selects the NRM, SCN, RND and RPT playback functions.
- ⑧ The lower **soft key**
confirms the selection (GO).
(CLR) deletes the selection.
- ⑨ **Rocker switch**
Selecting the CD track. Starting the rapid forward or reverse search of the CD.

When the front panel is open:

- ⑬ ▲ To eject a CD.

CD changer mode

- ⑪ **1, 2, 3, 4, 5, III**
Selecting CDs 1 – 6.
- ⑫ **III** (for 10 CD changer)
Switches to the second selection level (CDs 6–10).

OVERVIEW

Display

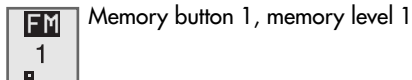


Input sources (Radio)

FM input source selected



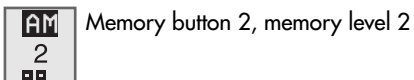
FM band (1-3)



AM input source selected



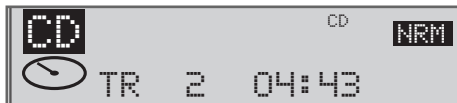
AM band (1-3)



DAB band (1-3)



Input sources (CD, AUX)



CD input source selected



CD mode



CD changer mode
(if connected)



Phone mode



Symbols and abbreviations

PROTECTED Device is coded

TP Standby mode for traffic news is activated

AF Alternative frequencies are activated
1...5 Preset button number of the selected station: 1,2,3,4,5

□ □ □ □ □ □ □ Memory levels 1, 2, 3

Radio:

- IS Intelligent search – RDS
- SRC Search
- MAN Manual tuning
- PTY Programme type selected
- SCN Scan mode – RDS/DAB stations heard briefly.
- 2S Secondary services are available (DAB).
- ENS Select ensembles.
- NXT Switches to the next ensemble.
- AF FM Switches to FM alternative frequency.
- GO Starts function.
- CLR Ends function.
- No DAB Program DAB reception not possible at present (in DAB mode).

CD:

- NRM Normal playback function
- SCN Scan mode – the first ten seconds of each track are played
- RND Random mode – the tracks are played back in random order.
- RPT Repeat mode – all the tracks on the CD are played repeatedly.

BASIC FUNCTIONS

Switching on and off

- 1 To switch on and off press »IO«.



Caution:

When the radio is switched on the automatic antenna extends. Therefore switch off the device before entering a car wash!

Volume and tone settings

Setting the volume

- 1 Adjust the volume with the **volume knob**.
 - Display: current volume setting (scale from »0« to »30«).

Tone settings

For »BASS«, »TREBLE«, »FADER«, »BALANCE«:

- 1 Press **SOUND** until the function is selected.
- 2 Select the desired setting using the **volume knob**.

- Adjust the bass setting with »BASS«
- Change the treble setting with »TREB«
- »FAD« enables you to balance the volume between the front and rear loudspeakers
- »BAL« enables you to balance the volume between the left and right loudspeakers

- 3 To finish the setting keep pressing the **SOUND** button until the selected station appears in the display.

Sound memory

You can store your personal sound settings on the memory buttons 1 – 5 and call them up whenever you want. You can store the settings for Bass, Treble, Fader, Balance and Loudness and call them up whenever you want.

Note:

The information for BASS and TREB is stored for each input source. The SOUND information stored on the memory buttons is independent of the input source selected.

Setting and storing

When you are in the »SOUND« setting mode, press a memory button until you hear the signal. The display shows: »SOUND 1«.

Calling up the settings

Press **SOUND**, then press briefly, for example, memory button 2. The display shows: »SOUND 2«.

Calling up the middle setting

Press **SOUND**, then the **III** button. The display shows: »LINEAR«. All the settings are set to the middle values. The loudness function is switched on.

Switching loudness on and off

The LOUD (Loudness) function raises the bass and treble levels to improve the sound at low volumes.

- 1 Press **SOUND** and BASS appears in the.
- 2 Press the upper **soft key** »LD«. – LOUDNESS is activated. The symbol is highlighted.
- 3 Press the lower **soft key** »LIN«. – LOUDNESS is deactivated.

RADIO (TUNER) MODE

Selecting the radio input source

- 1 With **SOURCE** you select the RADIO FM or RADIO AM input source.

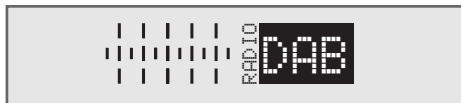


Note:

When the device is connected for the first time, the RDS (IS) search starts automatically.



When you select a new frequency band, the most recently selected station is played (Last Station Memory).



Search

- 1 Press **rocker switch** to select a new station.

Starting the IS search in **DAB mode** after switching on the device for the first time:

- 2 Press the upper **soft key** to select IS.
- 3 Start the search with the lower **soft key** (GO).
You can only select known ensembles.

Manual station search

- 1 Press the upper **soft key** to select MAN.
- 2 Use the **rocker switch** to change the frequency in incremental steps.
- 3 Hold down the **rocker switch** for fast tuning. Press it repeatedly to increase or decrease the FM frequency by 50 kHz.

Storing stations in the memory

Selecting the DAB or FM memory level

- 1 Keep pressing **»|||«** until the FM1 - FM3 or DAB1 - DAB3 memory level is active.

- 2 To store a station, press **»1«**, **»2«**, **»3«**, **»4«** or **»5«** until you hear a signal or muting.

Selecting stored stations

- 1 Press the **memory button** briefly.
– Display: the stored station, e.g. **»ENERGY«**.

The stations remain stored even if the device is disconnected from the power supply.

Activating and deactivating TP (Traffic Program)

- 1 To switch this function on and off, press **TP**.
– Display: **»TP«**.

Note:

If you are tuned to a station which does not broadcast traffic news, the device automatically searches for the next station which does.

If the TP function is activated, the CD or Tape mode is also interrupted for traffic news.

RADIO (TUNER) MODE

Additional TP functions

- 1 To interrupt the current traffic news briefly press the **TP** button.
 - The device remains in standby mode for the next announcement.
- 2 Press **TP** again to switch off the traffic news standby. The TP symbol disappears from the display.
- 3 You can preselect the volume for all traffic announcements. To set it, select the EXPERT level (see page 13).
- 4 If you only want to hear traffic news, press **TP** to activate the TP function and then turn the **volume knob** to zero.

Viewing the PAD/radiotext

- 1 Press **DISPLAY**.
- 2 The upper soft key switches to date, time and one-line radiotext.
- 3 The lower soft key switches to two-line radiotext.

Activating and deactivating the AF function

- 1 To switch it on and off, press **»|||«** until AF ON or AF OFF appears in the display.
 - Display: **»AF ON«** when the AF function is on.



Note:

You can only activate or deactivate the AF function for RDS stations which broadcast alternative frequencies.

Intelligent search (IS)

The intelligent search first stores RDS stations, followed by the other stations in order of signal strength. When the IS search is completed up to 30 stations are stored. You will hear the station with the best reception. The IS is always activated, unless you have selected another search function.

DAB note

If you enter a new DAB broadcasting region, you can start the IS search to check whether you are able to receive new ensembles.

Intelligent search (IS)

- 1 Press the upper **soft key** to select IS.
- 2 Start the search with the lower **soft key** (GO).
 - Display: **»IS→«**.

Note:

However, you can stop the search by pressing one of the station buttons **»1«** – **»5«** or the advance button.

Viewing the IS memory

- 1 Once the IS search is complete, use the **rocker switch** to select the station you want to hear.
 - Display: **»IS-Scan«**.

Tuning to stations with station search

- 1 Press the upper **soft key** to select SRC.
- 2 Press the **rocker switch** to start the search in the desired direction.
- 3 If a station is found, its code appears in the display.

Scan function

You can hear stations which can be received for 10 seconds each.

- 1 Press the upper **soft key** until **»SCN«** appears in the display.
- 2 Use the lower **soft key** (**»CLR«**) or the rocker switch to end the scan function. The last station selected is played.

Programme types (PTY)

Many FM stations provide the Programme Type (PTY) service. The PTY function enables you to automatically tune to stations broadcasting a particular type of programme, for example POP. The programme type information broadcast by a station can change according to the current programme.

The programme types can be displayed in the languages: GB, D, F and I. You can make your selection at the EXPERT level (see page 13).

List of programme types:

News	News programmes
Affairs	Politics and current affairs
Info	Specialised talk programmes
Sport	Sports programmes
Educate	Educational programmes
Drama	Radio plays and literature
Culture	Culture, religion and society
Science	Science programmes
Varied	Entertainment
Pop M	Pop music (hit parade)
Rock M	Rock music
Easy M	Easy listening

Light M	Light music
Classics	Serious classical music
Other M	Other types of music
Weather	Weather reports
Finance	Financial news
Children	Children's programmes
Social	Social information
Religion	Religious and philosophical programmes
Phone in	Phone-in programmes
Travel	Tourist information
Leisure	Leisure and hobby programmes
Jazz	Jazz music
Country	Country music
Nation M	National programmes
Oldies	Golden oldies
Folk M	Folk music
Document	Documentaries
Test	Alarm test
Alarm-Alarm!	Alarm message
None	No program type code

Selecting the programme type (PTY)

- 1 Press the upper **soft key** until PTY appears in the display.
- 2 Use the **rocker switch** to select the programme type you want to hear, e.g. POP M.
– Display: »POP« briefly, followed by the station name.

Note:

If no station is broadcasting the selected programme type you will hear the last station you selected and the PTY function is deactivated.

- 3 Start the PTY search with the lower **soft key** (GO).
- 4 PTYs can be stored on the memory buttons (page 8).

Deactivating PTY

- 1 Press the upper **soft key**, leave the function, and select the IS basic function.

Calling up the announcement menu

- 1 Press and hold down the **III** button to switch the announcement menu function on and off in the DAB mode.
– Display: »Announcement«.
Here you can turn various announcements on and off.
- 2 Use the rocker switch to select the announcement.
- 3 The upper soft key switches the announcement on and the lower soft key switches it off again.

The following DAB announcements may be broadcast:

Travel
Warning
News
Weather
Service
Special
Rad info
Sports
Finance

Selecting an ensemble

Within the DAB range, several stations on the same frequency are always combined to make up an ensemble.

- 1 Press the upper **soft key** until »ENS« appears in the display.
- 2 Press the lower **soft key** (»NXT«) to select an ensemble.
- 3 Use the rocker switch to choose a station in the selected ensemble.

When you have selected an ensemble, you can choose a station in the ensemble with the rocker switch.

The display shows the name of the ensemble in the top line and the name of the station in the bottom line.

Selecting the secondary service (2S)

The secondary service is an additional function of the DAB mode. A DAB program can contain other sub-programs (secondary service components), e.g. current broadcasts or foreign language news.

Calling up sub-programs

Sub-programs are available if the »2S« indicator appears in the display (top line, left). If secondary services are not available, "NO 2S" appears briefly.

- 1 Press the upper **soft key** to select »IS«, »ENS« or »SCN«.
- 2 Hold down the rocker switch to activate secondary services, if available.
The top line shows the name of the station and the bottom line shows the name of the sub-program selected.
- 3 Hold down the rocker switch again to switch to the next sub-program being broadcast.

If no information is being broadcast, »No 2S« appears.

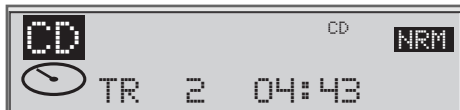
Leaving a sub-program

- 1 You leave the secondary service mode by pressing the rocker switch briefly and switching to another station.

CD (DISC) MODE

Inserting a CD

- 1 Press **OPEN**. The front panel opens.
- 2 Insert a CD into the compartment.
 - Display: »T1 00 00«. Playback starts automatically.



- 3 If the disc inserted contains CD text data, they are displayed automatically. CD texts include, for example, the album name, the artist and the piece of music.
- 4 With **DISPLAY** you can select various display types. Press it briefly to start the running text, and longer to switch to the track display.

Selecting the signal source

- 1 Press **SOURCE** until CD appears in the display.

Note:

The inserted CD is repeated automatically.

Selecting a title

- 1 Keep pressing the top or bottom of the **rocker switch** until the number of the track you want to hear appears in the display.

Searching for a passage within a track

- 1 During playback, press the top or bottom of the **rocker switch** and hold it down until you find the desired passage.
 - You can hear the tracks at fast speed and reduced volume.

Repeating a track (RPT)

- 1 Press the upper **soft key** to select the »RPT« function.
- 2 Start the repeat function with the lower **soft key** (GO).
 - The track is played back repeatedly.
- 3 Quit the function with the lower **soft key** »CLR« and return to normal playback.

Playing the start of a track (Scan)

- 1 Press the upper **soft key** to select the »SCN« function.
- 2 Start the Scan with the lower **soft key** (GO).
 - The first 10 seconds of the track are played.

Note:

To play the current track to the end, briefly press the lower soft key (OK, CLR).

Playing back tracks in random order

- 1 Press the upper **soft key** to select the »RND« function.
- 2 Confirm (GO) or delete (CLR) your selection with the lower **soft key**.
 - The tracks are played back in random order.
- 3 To end this function, select »NRM«.

Stopping CD playback

- 1 To change, for example, to the RADIO mode, press **SOURCE** briefly until »RADIO FM« appears in the display.

Ejecting the CD

- 1 Press **OPEN** to open the CD compartment.
- 2 Press **▲**.
 - The CD is ejected.

Note:

If you eject the CD and do not remove it within six seconds, the device will automatically pull it back in again.

CD MODE WITH CD CHANGER

Selecting the CD changer input source

This function is only possible if a CD changer is connected.



- 1 Keep pressing the **SOURCE** button until you see »MCD« in the display, followed by the CD you have just selected.

Selecting a CD directly

6 CD changer:

- 1 Select the CD with the memory buttons 1...5 or with »|||«.

10 CD changer:

- 1 Select the first 5 CDs with the memory buttons 1...5.
- 2 The »|||« button switches to the second level.
- 3 Select the next 5 CDs (CDs 6 – 10) with the memory buttons 1...5.
- 4 After a short while the function ends automatically.

Selecting a track

- 1 Keep pressing the **rocker switch** until the number of the track you want to hear, e.g. »Tr. 06«, appears in the display.

CD playback functions

See the "CD mode" section on page 12.

Other AUX connections

If you are not using a GRUNDIG CD changer, you can also connect other CD players or external devices to the car radio using the Hadok/GRUNDIG CDP adapter (available as an accessory).

- 1 Keep pressing **SOURCE** until »AUX« appears in the display (only if a CDP Adapter is connected).

Note:

You must operate the connected devices themselves. See the relevant operating manuals.

EXPERT LEVEL

To make the use of the device as simple as possible, a number of custom settings which are only required once or very occasionally are located on a special operating level (EXPERT).

Changing EXPERT settings

- 1 Keep pressing »SOUND« until »EXPERT« appears in the display.



- 2 Use the **volume knob** to select the required EXPERT setting, e.g. volume limit on switching on. Display: »ON Volume: 3«.
- 3 To activate it, briefly press the **SOUND** button.
– Display: »the selected programme, displayed inversely«. It is played at the volume displayed.
- 4 Use the »<< or »>>« soft keys or the **volume knob** to select the required volume.
- 5 Briefly press **SOUND** to conclude the setting.

- 6** To carry out the next setting repeat steps **2** to **5**.
- 7** To quit expert level keep pressing **SOUND** until you hear the signal.

The individual settings

1: Language – English, German, French, Italian: the selection of display languages.

2: Protection – Code settings to prevent theft – see the detailed instructions starting on page 16.

3: ON Volume – Volume limit when switching on.

- Display: »ON Volume --«: no limit.
- Display: »ON Volume 00« to »ON Volume 30«: a limit is entered.

4: Loudness – Boosts low frequencies at low volumes

- Display: »Loudness« »low«, »normal« or »high«.

5: SCV – Speed Controlled Volume
– Display: »SCV: Off«. SCV 1...140.

A setting is only possible if there is a speed controlled signal at the SCV connection (A1).

- » SCV: Off« : SCV is switched off
- » SCV: 140 « : Maximum effectiveness

The speed change while driving is shown in the top right section of the display, e.g. +4.

6: TP Mode – TP function on/off
– Display: on/off

When TP is »off«, the »TP« button is inactive.

7: TP Volume – Minimum volume for radio traffic news.

- Display: »TP Volume 5« to »TP Volume 30«.
Volume level, bordered display.

8: Phone – Muting in car phone mode.

- Display: »Mute« – Muting of the car radio is activated.
- Display: »Off« – Muting of the car radio is not activated.
- Display: »On« – You hear the phone via the speakers.

Note:

The phone mute signal (see page 17) must be connected.

9: Beep – Signal tone on/off

- Display: »Beep On« – Signal tone for confirming functions.
- Display: »Beep Off« – Functions are confirmed by a brief muting of the loudspeakers.

10: AM Band – On/off

- Display: »On« – The AM range can be selected.
- Display: »Off« – The AM range is switched off.

11: SW Band – On/off

- Display: »On« – The SW range can be selected.
- Display: »Off« – The SW range is switched off.

12: Search level– Search sensitivity

- Display: »Local« – Reduced search sensitivity.
- Display: »DX« – Immediate increased sensitivity.

13: RDS Regional – Automatic changing of the regional station

- Display: »On« or »Off«
- Display: »RDS Regional On« – Frequency change only possible between regional stations.
- Display: »RDS Regional Off« – Station change via automatic search.

14: Date Format

- Display: »DDMMYY« or »YYMMDD«

15: Clock »On«, »Off« or »RDS« (RDS synchronisation)

Note: With RDS synchronisation, settings 16 - 18 disappear. When Time is Off, settings 15-19 disappear.

EXPERT LEVEL

16: Time setting

17: Year setting

18: Date setting

19: Standby Clock – On or off. The time is displayed when the ignition is switched on.

20: Ignition – Switching on and off

– Display: »Ignition On« – The car radio can be switched on and off with the vehicle ignition.

– Display: »Ignition Off« – The device can only be switched on and off by pressing »IO«.

21: CD Level setting

CD unit volume adaptation.

22: MCD/Aux/MP3 Level setting

CD changer volume adaptation (if connected).

23: Display – Setting the positive or negative display.

– Display: »Blue« or »White«.

24: Display contrast – Setting the contrast for the display field.

– Display: »Disp Contrast«, bordered display.

25: Day/Night – Adaptation to the instrument illumination.

– Display: »On« or »Off«.

26: AF Enable – On or off. The DAB module can use alternative frequencies if this is available.

27: DAB → RDS – (If 26: on) – On or off. If the DAB reception is bad, you can switch back to an appropriate RDS station.

28: RDS → DAB – (If 26: on) – On or off. If the same station is available in FM on DAB, the device switches to DAB.

29: DAB Linking – (If 26: on). Program tracking if reception is bad. Switches to programs with the same content (hard), or to programs with similar content (soft), or switches off (off).

30: DRC – On or off. Dynamic range control - produces natural playback for programs with a high volume dynamic (e.g. classical music). The DAB station must be offering this additional information.

31: Rec. Limit – On or off. Changing the search speed. Checks the reception qualities of a DAB ensemble.

Receive Limit = off: every frequency is tested as to its reception quality.

Receive Limit = on: only the strength of the signal is tested. This generally speeds up the search.

32: Short IS – On or off.

When the device is switched on, the last station you were listening to comes on.

Short IS = on: when the device is switched on, the last 5 ensembles are also tested for their reception qualities.

Short IS = off: only the last station is available.

The code number for the device can be found on the identity card. Coding is not activated by default. When the coding is activated, the device is electronically secure. Following removal, it can only be switched on again if the code number is re-entered.

Activating coding

- 1 Select the EXPERT level by pressing **SOUND** until EXPERT appears in the display.
- 2 Select »Protection« using the **volume knob**.
- 3 Press **SOUND** briefly.
– Display: »-----« flashes.
- 4 Enter the code number by pressing memory buttons »1« – »4« repeatedly.

Example: Code number 1703

- »1« Press briefly once »1000«
 - »2« Press briefly seven times »1700«
 - »3« Press briefly ten times »1700«
 - »4« Press briefly three times »1703«
- 5 Briefly press **SOUND** to confirm.
– Display: »SAFE« – Coding is activated.
 - 6 To quit the EXPERT level hold down **SOUND** until you hear the signal.

Deactivating coding

- 1 If, for example, you want to remove the device, select the EXPERT level and select »SAFE« on the display.
- 2 To deactivate the coding, repeat steps **3** to **6**.

Renewed operation when coding is active

- 1 Switch on the car radio.
– Display: temporarily »SAFE«, then »1-----«.
– The »1« indicates the number of attempts at entering the code.
- 2 Enter the code number using the station buttons »1«, »2«, »3«, »4«.
- 3 Press **SOUND** to confirm your entry.
– The radio is in operating mode.

Note:

Only enter the correct code number! Take note of the increasing waiting time between attempts.

After the sixth failed attempt we recommend that you have a specialist dealer enter the code.

The waiting time not elapsed is displayed.

FITTING AND REMOVING THE DEVICE

Fitting the mounting frame and the device

- 1 Fit the mounting frame **b** in the radio recess **a** of the vehicle (Fig. 1). You will find the illustrations on the inside of the back page.
- 2 Bend the metal flaps **c** behind the radio recess **a** inwards or outwards as necessary, depending on the type of vehicle (Fig. 1).
- 3 Push the device into the fitted mounting frame **b** as far as it will go. The device latches in.

Note:

The device is very powerful, which means that it heats up considerably during operation. You must therefore make sure that no cables or other parts touch the device.

Fire hazard!

- 4 To pull out the device, remove the panel and insert the two removal hooks **d** into the opening and push them in as far as they will go (Fig. 5).
- 5 Push both hooks outwards and slowly pull out the device (Fig. 5).

Connecting the antenna

The device is designed for antennas with 75 Ω to 150 Ω impedance. Extended antenna cables, for example for rear mounting, can impair reception. If necessary use an antenna adapter (Fig. 2).

- 1 Fix the antenna adapter or cable in the plastic holder (Figs. 2 and 3).

Fuse

A 10 A/DIN 72 581 flat fuse is inserted in the device (Fig. 4).

Supply voltages

Flat pin connectors A (Fig. 4):

- A 8** Ground connection (minimum cross-section 2.5 mm²). Terminal 31 (Ground) of the vehicle.
- A 7** Connection for +12 V operating voltage (minimum cross-section 2.5 mm²). Terminal 30 (continuous positive) of the vehicle.
- A 6** Connection for instrument lighting. Terminal 58 of the vehicle. You can light up the device with the instrument illumination regulator.

- A 5** +12 V switching voltage output (max. 0.5 A). When the device is on, the switching voltage is on flat pin contact **A 5** and serves to extend and retract the antenna, provides an operating voltage for the antenna amplifier, etc.

- A 4** Connection for +12 V ignition. Terminal 15 of the vehicle.

- A 2** When the input is 0 V (from the Mute output of the car phone), you can switch to the PHONE IN input (Pin C11 and C12), or switch the device to Mute. This is dependent on the setting at the EXPERT level (pages 13/15).

- A 1** SCV connection for speed controlled volume regulation. The speedometer signal (Graduated Audio Level Adjustment) is detected automatically. However, digital signal protocols cannot be evaluated. (See Expert level, page 13).

FITTING AND REMOVING THE DEVICE

Loudspeakers

Flat pin connector A.

Maximum output power at 4 Ω loudspeakers:
4 x 25 W/4 x 50 W music signal power.

Front

- B 3** right +
- B 4** right -
- B 5** left +
- B 6** left -

Back

- B 1** right +
- B 2** right -
- B 7** left +
- B 8** left -

Caution:

Do not connect the loudspeaker connections to each other or ground them. This can damage the device irreparably.

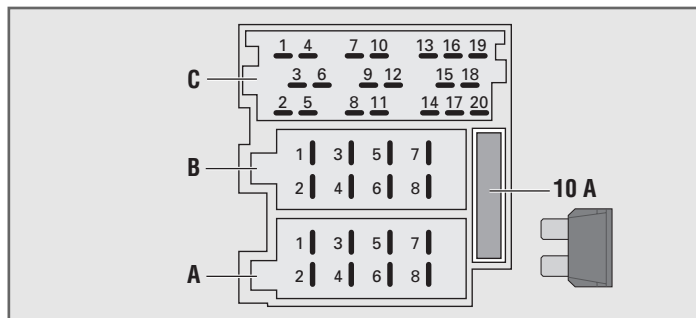
- C 11** PHONE IN +
- C 12** PHONE IN Minus
- C 13** CD bus control line, for AUX operation connect to C 15.
- C 15** CD bus ground.
- C 16** +12 V supply voltage for CD changer.
- C 17** Switching voltage for CD changer.
- C 18** CD-NF ground/AUX-NF ground.
- C 19** CD-NF left/AUX-NF left.
- C 20** CD-NF right/AUX-NF right.

Additional connections

Flat pin connectors C.

CD changer/AUX connection:

- C 1/2** LINE OUT back left/right
- C 3** Ground
- C 4/5** LINE OUT front left/right



INFORMATION

Radio reception conditions

Reception conditions in the VHF range change all the time during a journey. Mountains, buildings or bridges can impair reception. This is especially true when the station is very distant.

Radio Data System (RDS)

RDS is an information system for which most VHF stations transmit additional signals. With RDS stations, the name of the station appears as an abbreviation in the display, for example »DLF«. RDS stations are broadcast by several transmitters at different frequencies (alternative frequencies). If an RDS station is selected the device automatically switches to the alternative frequency with the best reception, provided one is available.

Alternative Frequencies (AF)

If you are listening to an RDS station which broadcasts on several different frequencies, the car radio automatically switches to the frequency with the best reception. The AF function is activated by default.

Note:

In areas with very poor reception there may be long pauses while the radio attempts to find a better frequency. If this is the case you can deactivate the AF function.

Enhanced Other Network (EON)

The EON function allows you to hear traffic news, even when you are listening to another RDS station which does not broadcast its own traffic news. However, this only works if the RDS broadcaster you are listening to also provides another RDS station with traffic news. Standby mode for radio traffic news (TP) must also be activated.

CD media playback capabilities

This device can be used to play back suitable CD-R/RW media. However, copy protection functions can restrict playback capabilities. If you identify any restrictions, get in touch with an authorised dealer or with GRUNDIG customer service.

In general, this does not indicate a device failure.

DAB operation

With DAB you can receive digital radio in CD quality. Within the DAB range, several stations are always broadcast on the same frequency. These programs are combined to create ensembles.

A program can thus contain up to 12 further sub-programs.

DAB frequency band

DAB stations and ensembles are broadcast in frequency range III (174 - 240 MHz) or in the L frequency range (1452 - 1492 MHz).

DAB RDS switching

Your DAB RDS receiver can select the best program source automatically without you having to press a button. This switching method can be changed in the expert menu, page 15.

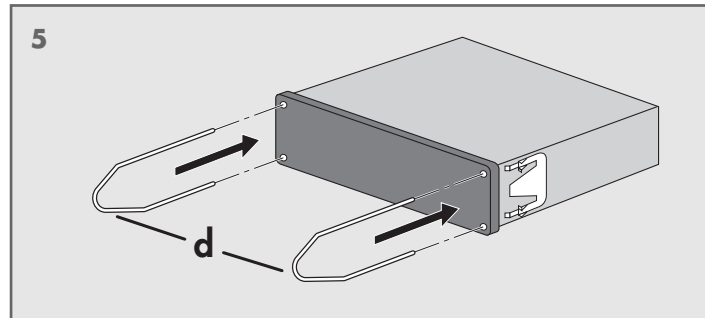
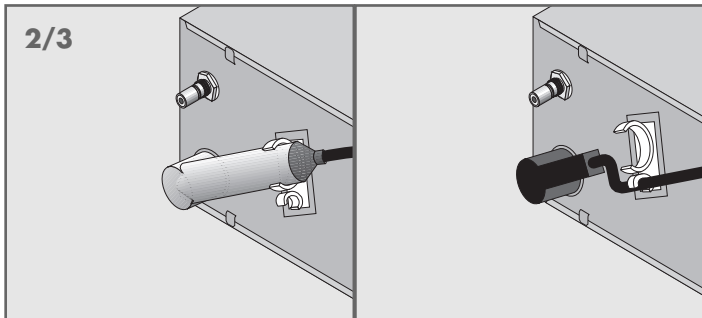
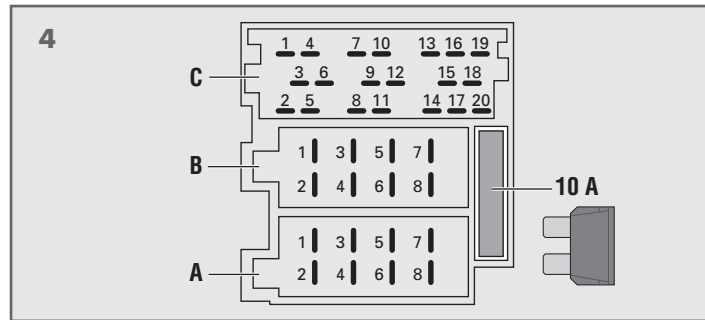
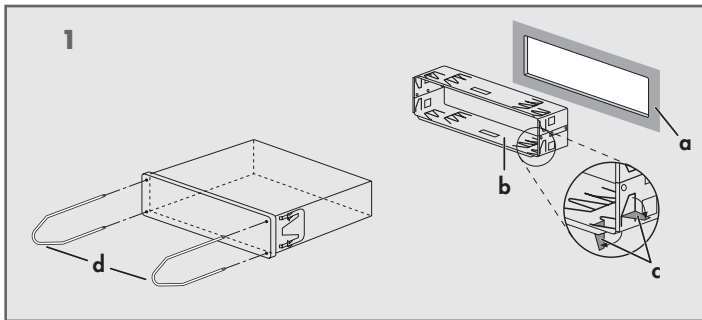
Troubleshooting

If a fault occurs, first refer to this information before you take the device for repair.

If you are unable to rectify the fault using the information given here, contact your specialist dealer.

Never under any circumstances attempt to repair the device yourself, as this invalidates the guarantee.

Fault	Possible cause	Remedy
The device cannot be switched on	Control unit not properly attached On/Off button pressed too briefly	Attach the control unit again Hold down the On/Off button longer
Display error	Contacts dirty. Control unit installed incorrectly	Clean the contacts with a lint-free cloth.
Poor radio reception	You are in an area with poor reception conditions	Wait until conditions improve
Frequent temporary loss of radio reception	AF function is working in an area with poor reception	Deactivate AF function
Not all loudspeakers work	Incorrect BALANCE and FADER settings, faulty connection	Check settings and change if necessary
CD player does not work Tracks skip	The device is not installed correctly The CD is dirty	Fasten the device Clean the CD with a soft lint-free cloth - do not use cleaning solutions
CD sound interference occurring	CD-R/RW media with copy-protected tracks being played	Change the CD
Rear speakers switch off	Device too hot (over 70°C)	Turn down the volume
After every switching on with the ignition the code must be entered	Operating voltage (A7) and ignition (A4) are inverted	Check the sockets (page 17)
The device switches off after 1 hour	Pin A4 not connected.	Connect A7 and A4 correctly (page 17)



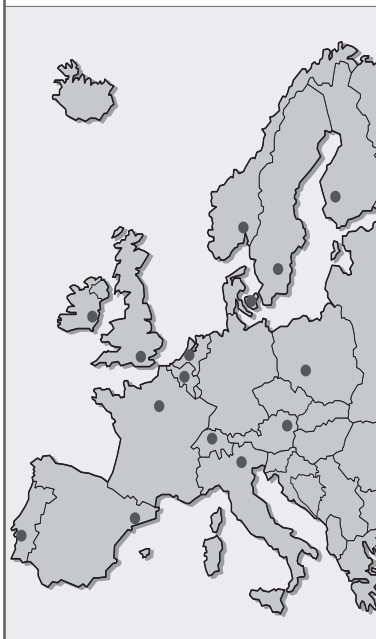
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