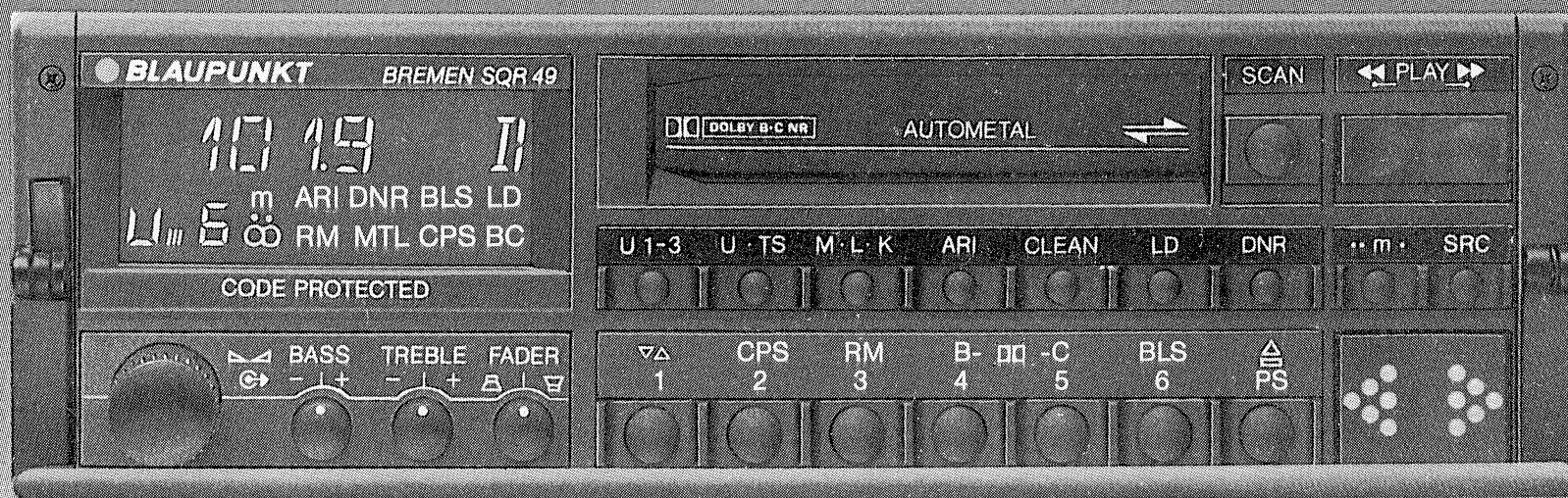


**BEDIENUNGSANLEITUNG
OPERATING INSTRUCTIONS
MODE D'EMPLOI
ISTRUZIONI D'USO
GEBRUIKSAANWIJZING
BRUKSANVISNING**



BLAUPUNKT

BOSCH Telecom

BREMEN SQR 49

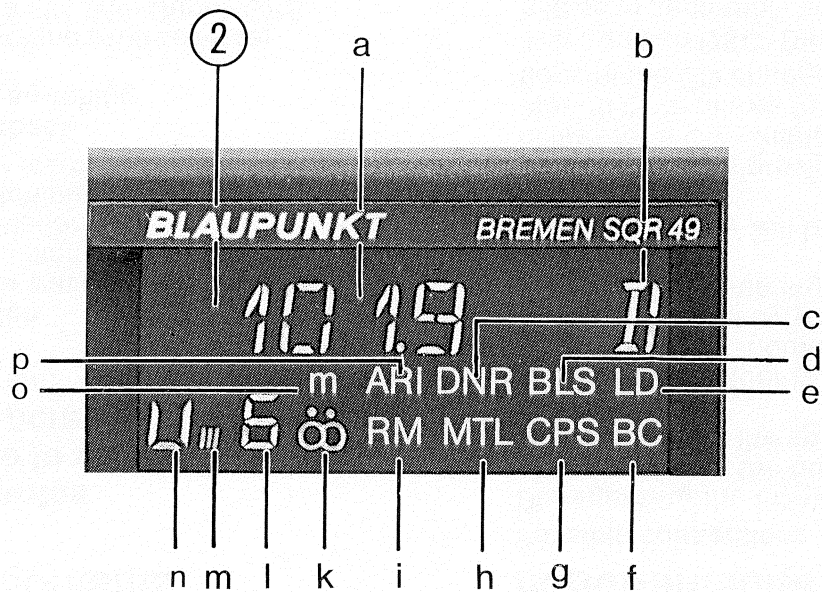
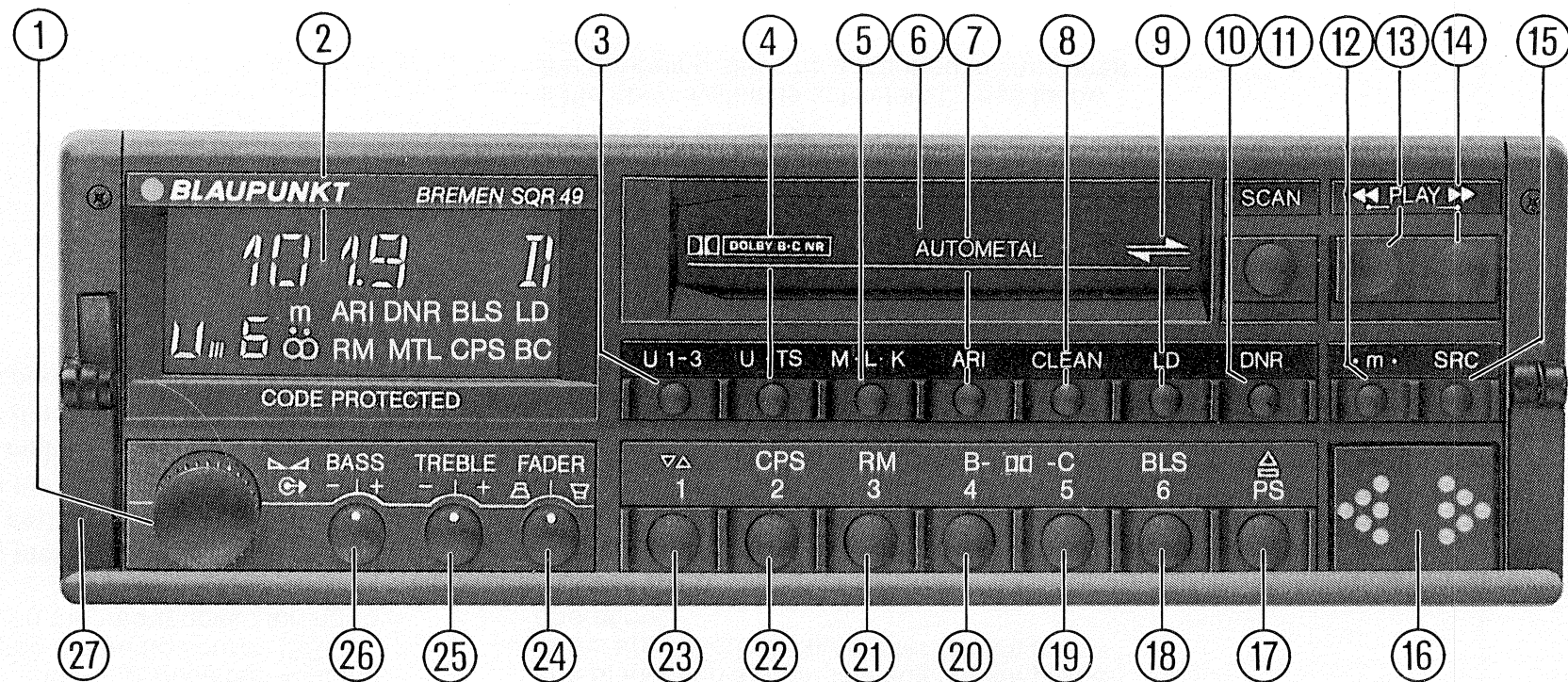


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Important information

Possible connections

Disregarding the following notes may lead to a destruction of the output stages!

Do not connect the speaker outputs to ground!

A Quick-Out holder is delivered with this cassette car radio. Should you wish to install or to extend the set by yourself, read carefully the attached mounting and connecting instructions.

A brief summary will be given at the end of this guide.

This car radio is provided with connecting facilities for a CD-Changer. The car radio Bremen SQR 49 allows to control important functions of the CD changer.

The function **DSC (Direct Software Control)** allows to separately adjust and store the display colour, search tuning sensitivity level, loudness, the volume of ARI traffic messages and of the alert signal. The adjustment procedures are described in chapter "Notes on operation".

Quick Out

This car radio comes standard with a Quick Out handle.

Quick Out allows you to pull the radio out of the compartment and to take it along. The preset stations remain stored.

If you wish to pull the unit out of the compartment

- switch the set off and pull the bracket ②7.

In order to activate radio reception or cassette playback

- insert the set until it stops and turn the bracket to the front panel.

The unit can be operated if the code system is switched off.

If the code system is activated, please follow the operating steps as described in "Anti-theft coding".

FM reception in the car

In-car FM reception offers you the same advantages as your home equipment.

FM will give you the finest quality of music and speech reproduction.

However, FM reception conditions are more difficult in a moving car than in your home, where the aerial is stationary. When your car is in motion, signal strength is constantly fluctuating, although you may not notice this.

The reception concept Codem IV, developed by Blaupunkt minimizes the different reception interferences, such as varying station field strength, multipath reception and shadows. If the field strength is too weak (the reception conditions get worse), you should tune in to another FM station.

Optimum reception can be obtained only if the aerial is correctly mounted and in working order.

Basic guide to operation

This chapter is divided in the following three sections:

Sound control

Radio operation

Cassette operation

In the case of double functions separate instructions are given. **Functions**, which need further **explanations** are described in chapter "Notes on Operation".

② Quick Out handle

to easily pull the unit out of the compartment

① On/off/volume control

Sound control

① Balance control

For adjusting the left/right volume selector.
Pull knob (locks)
Push button back in after adjustment.

⑨ LD button

Loudness - boosts bass at low volume levels to compensate for the inefficiencies of the human ear.

Loudness is switched on/off by pressing the button LD ⑨. "LD" ②e lights up in the display when the loudness is switched on.

⑩ DNR™ button

DNR stands for Dynamic Noise Reduction. This function allows to reduce the noise which may be possible during cassette and radio operation.

DNR is switched on when the display ②c indicates "DNR".

Press the button to activate and deactivate this function.

② Fader

For adjusting the front/rear volume.
Press knob so that it unlocks and turn it.

If only two speakers are connected, the fader must be set to middle position. Lock rotary control.

② Treble control

Unlock rotary control by pressing it.

➡ - treble is boosted

➡ - treble is cut

Lock rotary control.

② Bass control

Unlock rotary control by pressing it.

➡ - bass is boosted

➡ - bass is cut

Lock rotary control.

Radio operation

② Display - for

a) Frequency, code

b) ARI zone identification or
Title selection - at Super -CPS the number of titles to be skipped is displayed

c) DNR (noise suppression)

d) BLS (automatic fast forward at tape blanks)

e) LD (loudness)

f) Dolby B/C

g) CPS (cassette program search)

h) MTL (tape type)

i) RM (radio reproduction during fast winding)

k) ∞ (stereo)

l) 1-6 (station buttons)

m) I-III (FM memory banks)

n) U K L M (wavebands)

o) Search tuning sensitivity/
manual tuning

p) ARI

③ Button U 1-3

FM waveband button (87.5 - 108 MHz) and for the FM memory banks I-III.

On each memory bank six FM stations can be stored by means of the buttons ⑱ - ⑳.

By pressing button ③ several times you switch over between the memory bank I, II and III. The display ②m shows the activa-

ted memory bank.

④ Button U · TS

With this button the six strongest stations of the relevant area can be automatically stored and called up.

⑤ Button M · L · K

Waveband button for

MW 522 - 1620 kHz

LW 144 - 288 kHz und

SW 5850 - 6300 kHz (49 m waveband)

7095 - 7500 kHz (41 m waveband)

9325 - 9950 kHz (31 m waveband).

An automatic switching is provided at the end of each SW waveband.

⑦ ARI button

Function switched on -

The FM waveband is automatically switched on and ARI lights up in the display ②p.

Only traffic information stations are received broadcasting between 87.5 - 108 MHz. The automatic alert signal is in stand-by mode.

Press ARI button once again to switch off the ARI function.

⑪ SCAN button

This button serves to automatically search and play the receivable stations of the selected waveband.

⑫ Button ●● m ●

For setting the search tuning sensitivity / manual search tuning

● - normal sensitivity

Search tuning only stops at stations that provide good reception.

●● - high sensitivity

Search tuning also stops at stations that provide minor reception.

m - manual tuning.

The search tuning sensitivity can be stored for each station separately since receiving conditions vary from region to region (see "Setting of Search Tuning Sensitivity").

⑮ **Button SRC (SOURCE)**

This button serves to switch over between the audio sources at cassette operation (cassette ⇌ radio).

If an external CD or DAT player is operated, the CD/DAT playback has priority.

If the Blaupunkt CD-Changer is operated switching between the audio sources of the sets connected can be carried out with SRC (CD, cassette, radio).

⑯ **Search tuning rocker switch - station selection**

⑰ **Button PS (Preset Station Scan)**

This button serves to scan a stored program on the chosen waveband, in FM mode on all memory banks.

Button depressed - the stations are scanned in intervals of 8 seconds.

Quit this function by pressing this button once again.

⑱ - ㉓ **Buttons 1, 2, 3, 4, 5, 6 (station buttons)**

Storing a station - hold button depressed until the program is audible again.

Call up - press button.

Cassette operation

② **Display - for**

- a) Cassette functions
- b) Title selection — at Super-CPS the number of titles to be skipped is displayed
- c) DNR (noise suppression)
- d) BLS (automatic fast forward at tape blanks)
- e) LD (loudness)
- f) Dolby B/C
- g) CPS (cassette program search)
- h) MTL (tape type)
- i) RM (radio reproduction during fast winding)

⑧ **Button „CLEAN“**

This button serves to display the operating time elapsed since the last maintenance of the cassette mechanism.

⑪ **Button SCAN (scanning mode)**

Titles are played for a short time one after the other.

⑬ ⑭ **Rocker switch (fast winding)**

◀◀ ⑬ depressed - fast rewinding.

▶▶ ⑭ depressed - fast forward.

Stop fast winding by pressing the other side of the rocker switch.

At the beginning and the end of the tape, fast winding is stopped automatically.

The set switches over to cassette reproduction (at the end of the tape after automatic track switching).

⑮ **Button SRC (SOURCE)**

Allows to change over between the audio sources cassette ⇌ radio.

The display shows the activated audio source.

If an external CD or DAT player is used the CD/DAT playback has priority.

If the Blaupunkt CD-Changer is used, the audio sources (CD, cassette, radio) can be selected with SRC.

The red lettering on the buttons ⑰ - ㉓ applies for cassette operation.

The cassette functions can only be activated during cassette operation.

⑰ **Button △ - cassette ejection**

⑱ **Button BLS (Blank Skip - skipping of tape blanks)**

This function allows to skip pauses on the tape e.g. at tape end.

The display ②d indicates BLS when this function is activated.

In case of a pause lasting more than 15 sec. the cassette is fast forwarded automatically to the end of the tape or to the following track.

⑲ ⑳ **Buttons □□ (Dolby NR*)**

Cassettes with Dolby NR-B or Dolby NR-C encoded tapes can be played.

These modes are switched on/off with button ㉑ for "Dolby NR-B" and button ⑲ for "Dolby NR-C".

The display ②f shows the activated mode.

* Noise reduction system manufactured under license from Dolby Laboratories. The word Dolby and the double D symbol are the trademarks of Dolby Laboratories.

㉑ **Button RM**

Radio Monitor - allows radio operation during fast winding.

㉒ **Button CPS (Super-CPS)**

This button serves to select particular tunes. The display indicates the number of titles to be skipped.

㉓ **Track selector**

Press this button to switch over to the other track.

The display ② shows which track is played (TR1 or TR2).

Notes on operation

On/off ①

Turn knob

Sound control

Volume ①

(TREBLE) ②⑤

Depress knob to unlock it if you want to adjust treble.

Bass ②⑥

Depress knob to unlock it if you want to adjust bass.

Balance ①

Pull out knob and adjust the left/right sound volume.

Press knob.

Fader ②④

To adjust the front/rear sound volume.

When four speakers are connected, maximum volume is obtained in middle position.

When two speakers are connected, turn the fader into middle position.

The loudness

At reduced volume the human ear is less sensitive to bass than to middle and higher frequencies.

This effect is reduced with increasing volume. Since the perception of sound depends on the type of equipment (amplifier), the arrangement and the type of the speakers as well as on the vehicle, the loudness can be adjusted in different levels.

The loudness is switched on or off by

- pressing button "LD" ⑨. When the loudness is switched on "LD" appears on the display ②e.

The desired level is adjusted as follows:

- Hold button "LD" ⑨ depressed for approx 8 sec until "LEVEL" flashes and a number between 1 - 6 is displayed.

Set the desired level with the rocker switch ⑩ (← downwards, → upwards).

In order to store the setting

- press momentarily the button "LD" ⑨.

Radio operation

The following wavebands can be received:

FM 87,5 - 108 MHz

MW 522 - 1620 kHz

LW 144 - 288 kHz und

SW 5850 - 6300 kHz (49 m waveband)

7095 - 7500 kHz (41 m waveband)

9325 - 9950 kHz (31 m waveband).

Selecting a waveband

Select the desired waveband by

- pressing the keys ③, ④, ⑤ or ⑦.

An automatic switching is provided when the end of an SW band is reached.

Selecting a station

... using the search tuning rocker switch

In order to start the search tuning

- press button ⑩. Start the search tuning until you have tuned to the desired station. Hold the rocker switch depressed for more rapid tuning.

... using station buttons and memory banks

For this, a prior storage allocation as described in chapter "Storing a station" is required.

- In order to call up FM stations, press the button U 1-3 ③ several times until the desired memory bank I, II or III ②m is displayed.
- Now press the corresponding preset button.

The stations stored in the travelstore range can be called up after having pressed the button U-TS ④.

... using the SCAN button ⑪

This button serves to automatically search and scan programs of the adjusted waveband.

- Press button SCAN — all stations are played for 8 sec.

When the desired program has been found,

- press button "SCAN" once again. The scanning function is switched off.

The scanning function can be activated on all wavebands.

... using Preset-Scan (PS) ⑰

This button serves to automatically search and scan the stored programs of the adjusted waveband (in case of FM on each memory bank I, II, III and T).

For this, a prior storage allocation as described in chapter "Storing a station" is required.

- Press momentarily button PS, the set scans the next stored station.

The program of the corresponding station is played for a short time. Then the next stored station is played, etc.

If no station is stored on a certain preset button, the unit skips to the next station.

Preset-Scan is functional on all wavebands.

Having found an appropriate program,

- press button PS once again. Preset-Scan is switched off.

Storing a station

... using automatic search tuning

In FM mode, you can store 3x6 stations on 3 memory banks. The FM memory banks can be selected by pressing the button U 1-3.

You can store 6 stations of each other waveband (MW, LW and SW).

Additionally, the 6 strongest FM stations on the travelstore range can be stored automatically.

Stored programs and stations can be called up again by pressing the corresponding preset button.

For storing a station proceed as follows:

- Should you wish to store an FM station, select a memory bank by pressing the button U 1-3 ③ or U_{TS} ④ several times, if required. The display ②m indicates the number of the corresponding memory bank I, II, III or „T“.

In order to store the desired station,

- hold the appropriate preset button ⑱ - ㉓ depressed until the audio returns (approx. 3 sec). This station is now stored.

The preset indicator ②l shows which preset button has been used.

Repeat this procedure for the other presets, as required, on all wavebands and FM memory banks.

If you use the search tuning to tune to a station already stored, the display ②l, m shows for approx. 5 sec the corresponding preset button and in case of FM mode also the corresponding memory bank.

... using manual tuning

If you wish to store a station without yet being within that station's range,

- press button ●● m ● ⑫ until the display ②o shows "m".

Here, "m" stands for manual tuning.

Should you wish to store an FM frequency, first select the memory bank by

- pressing the button U1-3 ③.
- Press the rocker switch to tune to the desired frequency and store the station as described.

In FM mode, tuning is effected in steps of 50 Hz.

For fine tuning two digits behind the decimal point are indicated.

Store the station by

- pressing the appropriate preset button (until the audio returns).

Having stored the station in this way

- switch to station search tuning (● or ●●) by means of the button ●● m ● ⑫.

Besides the stations already stored, the last station you listened to on each waveband is also stored.

... using Travel Store

The travel store function enables you to store automatically the 6 strongest stations of your particular reception area.

We recommend to use this function especially when you are travelling.

Switch on travel store and activate the station memory by

- pressing button U·TS ④ for approx. 2 sec.

While storing the set is muted for approx. 2 sec.

Mono switching

Your radio is fitted with a Blaupunkt FM tuner (Codem IV), which largely ensures undisturbed reception and perfect sound.

In areas where signal strength is insufficient and/or where multipath reception due to reflections can occur, the unit switches gradually from stereo to mono. This provides for considerably better reception while driving. In areas with especially critical reception conditions we recommend to switch to "m" by means of the button ●● m ● in order to suppress the background noise in stereo mode. The stereo indicator ②k goes off.

Setting the search tuning sensitivity

- a) with button ●● m ● ⑫.

The display ②o indicates the activated sensitivity setting.

- – normal search sensitivity

Stereo broadcastings are transmitted in stereo.

- – high search sensitivity (stereo)

m – manual tuning, at the same time "mono" is activated (retarded).

- b) with software

When the station density is extremely high or low, it can be useful to adjust the level of the two search sensitivity settings (●/●●) separately.

- Select the search sensitivity setting (● or ●●) the level of which you want to change and
- press button ●● m ● ⑫ for approx. 8 sec until "LEVEL" and a number between 1-3 is displayed.
1 \triangle high search sensitivity
3 \triangle no sensitivity
- Adjust the desired search sensitivity by means of the rocker switch ⑩ (← downwards; → upwards).

In order to store the adjustment

- press momentarily button ●● m ● ⑫.

Cassette playback

In order to obtain optimum playback quality, we recommend to activate the system (noise suppression, tape type) which was used for recording.

- Check whether a Dolby B-NR, Dolby C-NR, or a cassette without Dolby NR is used.
- Insert the cassette into the cassette compartment (side A or 1 facing upwards).

The cassette is automatically transported into playback position.

The buttons ⑰ - ㉓ now serve for cassette operation (red lettering).

The cassette will be played back in the direction that was used last. The display indicates the corresponding track (TR1/TR2).

When the end of the tape is reached, the unit will automatically reverse direction and resume play (autoreverse operation).

The cassette will be ejected again, if you

- press button \triangle (17).

Tape type switching

The tape type switching is done automatically (METAL, CrO_2 , Fe_2O_3). The display (2)h indicates "MTL", if METAL or CrO_2 cassettes are used.

Dolby-NR

The unit can be used to play back cassettes which have been recorded

- a) with Dolby B NR
- b) with Dolby C NR
- c) without noise reduction systems.

On cassettes which have been recorded with Dolby NR*, background hiss is much lower and dynamics are better. Dolby C NR goes a stage further than Dolby B NR and reduces undesired background hiss even further.

Dolby B or C NR are switched on/off by

- pressing button (20) or (19).

The display (2)f shows the corresponding symbol B or C. If no symbol lights up, Dolby-NR is not switched on.

* Noise reduction system manufactured under license from Dolby Laboratories. The word Dolby and the double D symbol are the trademarks of Dolby Laboratories.

Track switching (autoreverse operation) (23)

The unit is equipped with a high-quality autoreverse cassette mechanism.

Having inserted the cassette, playback starts in the direction used last.

The display indicates TR1 or TR2 (TRACK 1 or 2).

When the end of the tape is reached the unit automatically reverses direction and resume play (autoreverse operation).

The track can be converted at any time by

- pressing the button $\nabla\blacktriangle$ (23).

Attention!

Stiff cassettes may change from track to track without warning. If this happens the tape winding should be inspected, and respooling the cassette may prove helpful.

If an activated cassette function cannot be carried out, the cassette will be ejected to avoid harmful effects upon the cassette. If cassette ejection is also not possible, "TAPE ERROR" will be displayed (22).

By switching the unit off and on, the cassette function can be activated again.

Selecting a title with Super-CPS

CPS stands for **C**assette **P**rogramme **S**earch and enables you to skip to particular music tracks.

Up to 9 tracks can be skipped in both forward and backward direction.

CPS is switched on or off by

- pressing button CPS (22).

If this function is activated, the display (2)g indicates CPS.

In order to skip to a particular music track

- press button $\blacktriangleright\blacktriangleright$ (14) (forwards) or button $\blacktriangleleft\blacktriangleleft$ (13) (backwards) as often as required.

The display (2)b shows the number of tracks to be skipped.

Use the rocker switch ($\blacktriangleleft\blacktriangleleft$ or $\blacktriangleright\blacktriangleright$) to increase the entry and the other side of the rocker switch ($\blacktriangleleft\blacktriangleleft$ or $\blacktriangleright\blacktriangleright$) to stop search tuning.

SCAN (11)

When the scan function is activated, the unit successively plays the tracks on the cassette for approx. 8 sec. Having played a track for 8 sec the unit skips to the following track and starts to play again.

The scan function is activated by

- pressing the button SCAN (11). The display (2)a indicates "SCAN".

The tape quickly winds forwards and the beginning of the following track is played.

The entire track will be played, if you

- press the button SCAN once again.

Scan is deactivated and the corresponding track is played without interruption.

Automatic fast forward at blanks

using **BLS** (Blank Skip)

Frequently, purchased cassettes are not fully recorded so that the cassette may contain longer blanks at the end of the tape.

BLS recognizes blanks lasting more than 15 sec. In this case, the tape is automatically winded fast forward. This function is activated, if the display (2)d indicates BLS.

In order to switch BLS on or off,

- press button "BLS" (18).

Listening to the radio while fast winding

using the button **RM** (Radio Monitor) (21)

During fast winding (also at SCAN, CPS, BLS) the unit is usually muted. In this case, however, radio operation can be activated by

- pressing the button RM (21). The display (2)i indicates "RM".

As soon as fast winding starts, broadcastings of the tuned station are received.

Press this button once again to switch off this function. The display no longer indicates "RM".

Switching between audio sources

using the button **SRC** (SOURCE) (15)

This button serves to switch over between cassette and radio operation even if the cassette remains inserted.

If you switch over to radio operation, the cassette tape is stopped. The tape head and the pressure rolls retract in order to protect the cassette and cassette mechanism (stand-by operation).

If an external CD or DAT player is operated, the CD/DAT playback has priority.

If the Blaupunkt CD-Changer is operated, you can switch over between the audio sources of the connected units by means of SRC (CD, cassette, radio).

Checking the frequency/tuning in to a station

During cassette operation you can check the frequency of the tuned station.

- Press the rocker switch ⑩.

The frequency of the tuned station is displayed for approx 3 sec.

Should you wish to tune to a particular station (e.g. a station which broadcasts traffic messages),

- press the rocker switch for a second time while the frequency is still displayed. Search tuning starts and stops at the next receivable station. If ARI has been activated, it stops at the following receivable ARI station.

Traffic broadcast reception (ARI)

Certain FM stations broadcast local traffic messages from time to time. Besides various other advantages, the ARI system will make it easier for you to find these stations. You may identify a traffic information station by a changing background colour of the display. Furthermore, the zone identification letter lights up in the display ②b. The frequency of the relevant station broadcasting traffic information is shown for example on the blue motorway signs (fig. 3).

Switching ARI on

Having activated the ARI function, all stations which do not broadcast traffic information are muted. Should you wish to receive traffic information stations only,

- press the ARI button ⑦.

If ARI is activated, the ARI logo is shown on the display ②p.

If you do not receive a traffic information station yet, the alert signal sounds and the display indicates „NO ARI“.

- In this case, press the rocker switch ⑩. The next traffic information station will be received. The background colour of the display changes and the zone identification letter is displayed ②b.

Press once again the ARI button ⑦ to switch off the ARI function.

The alert signal

Whenever you leave the range of a traffic information station, making reception difficult, the zone identification letter ②b goes off. The display colour changes and after approx. 30 sec an alert signal will be released, if the ARI function is still activated. When this happens, you should a) tune to another ARI station, or b) deactivate the ARI function by pressing the ARI button. The alert signal then stops immediately.

Please note:

When you press a preset button on which a non-ARI station has been stored an alert signal is released. In this case, you should switch off the ARI function (pressing button ⑦) or tune to another traffic information station.

Adjusting the volume for traffic information and alert signal

Should you wish to receive traffic information only, it is possible to reduce the volume either

slightly or totally whilst maintaining reception of traffic messages. When a traffic message is broadcast, it is automatically reproduced at the preset volume, although you have previously turned down the volume or switched over to cassette operation.

The preset volume for traffic messages can be adjusted in line with your particular requirements (e.g. having connected an amplifier or in case of a quiet or loud vehicle).

- Press the ARI button ⑦ for approx. 8 sec until the display indicates „LEVEL“ and shows a number between 1 and 9. Now you receive the program with the adjusted volume.
- Adjust the minimum volume for the traffic messages and the alert signal by means of the rocker switch ⑩ (← decreasing; → increasing)-

In order to store your adjustment

- press the ARI button ⑦.

ARI with cassette operation

The set enables you to listen to a cassette while maintaining reception of traffic messages. When a traffic message is broadcast, cassette playback is automatically stopped and the traffic message transmitted.

Proceed as follows to activate this function:

- Press the ARI button ⑦ to activate the ARI function. „ARI“ ②p is displayed, when the ARI function is activated.
- Tune to an appropriate traffic information station of the relevant area.
- Insert the cassette into the cassette compartment. Now you can listen to cassette playback, which will be interrupted automatically in the case of traffic information announcements.

Start of automatic search tuning

- When you leave the range of the adjusted traffic information station, making reception difficult, the set automatically tunes to another traffic information station when cassette operation is activated or the volume at radio operation turned down.

Anti-theft coding

A freely selectable four-digit code renders your car radio unusable to thieves.

In addition, you can enter max. 2 x 8 digits for your car registration number (owner identification).

When switching on the unit after the power supply to the unit has been interrupted (e.g. in the case of theft or repair), the entered data for each level are displayed for 8 sec. Since your individual data are displayed it is easy to prove your ownership.

The unit now requests the correct entry of the code number. If an incorrect code number is entered, the display indicates for approx. 10 sec. "-----".

After the fourth unsuccessful attempt of entering the correct code number, this period is extended to 1 hour. After 16 incorrect attempts the set can only be decoded by special means.

If no code has been entered initially, the set can be operated without entering a code after a power supply cut off.

Should you wish to protect your set by means of the anti-theft coding, choose a 4-digit number and write it down.

Attention:

We urgently suggest you to note your secret code on the attached car radio ID card. If you do not remember your code, you will not be able to make the set functional again when the power supply was interrupted.

In this case, your car radio will have to be decoded in our central service workshop or in

one of our foreign agencies on presentation of the car radio ID card.

Please preserve your ID card and the receipt carefully even when the warranty period has run down so that you can prove your ownership at any time.

Entering the code

The code can be entered as follows:

- press simultaneously the preset buttons 1 ²³ and 4 ²⁰ (hold them depressed) and
- switch the unit off and on.

If the unit is uncoded, the word "Code" blinks on the **green** display. Should "Code" be indicated on the **red** display, the unit has already been coded previously.

If the unit is uncoded, you may enter an arbitrary code by means of the button 1 - 4.

- Press button 1 ²³ in order to enter the first digit.
- Press buttons 2, 3 and 4 until the desired code is displayed (e.g. 1637).
- For storing the entered code, press first the left and then the right part of the rocker switch ¹⁶.

The word "Car" blinks for approx. 3 sec on the display.

Afterwards the first digit for entering the car registration number blinks. For this, please refer to chapter "**Entering the car registration number**".

If the car registration number has already been entered,

- press the right part of the rocker switch. The unit switches over to the station tuned in last.

ATTENTION

If your unit is not connected to permanent plus, the word "PLUS" appears on the display for about 2 sec.

The unit then tunes in to the station received last.

In this case, the unit cannot be coded. For coding, connect the set to permanent plus (as described on the label of your set).

Entering the car registration number

The following digits can be entered: A ... Z; -, 0 ... 9. The digits appear on the display in forward order when button 2 ²² is depressed and in reverse order when button 1 ²³ is depressed.

The digits are displayed in fast sequences, if you hold the button depressed.

Should you wish to enter the car registration number,

- press button 1 or 2 in order to call up the relevant digit.

The input position (blinking position) is shifted to the left or to the right by pressing buttons 3 and 4, resp.

- Press the button 4 ²⁰ or 3 ²¹ and
- enter the following digit.

Having entered 8 digits, the following input group (9-16) can be activated by

- pressing button 4.

For storing the entry of the car registration number,

- press first the left part and then the right part of the rocker switch ¹⁶.

If you do **not wish to enter** the car registration number of your car,

- press the right part of the rocker switch ¹⁶. The unit then switches over to the station tuned in last.

Erasing the code

- Press simultaneously the preset buttons 1 and 4 (hold them depressed) and
- switch the unit on.

Your car registration number appears on the display. Then "CODE" is indicated on the red background of the display.

If "CODE" lights up on the green background, the code has already been erased.

- Enter your code by means of the buttons 1-4.
- Now press first the left part and then the right part of the rocker switch ⑩. Your personal code is erased and the unit switches over to the station tuned in last. The number remains stored and is displayed when the unit is recoded or when the power supply has been interrupted.

Changing the code

- Erase your personal code (as described in the previous chapter).
- Now switch off the unit.
- Press simultaneously the preset buttons 1 and 4 (hold them depressed) and
- switch on the unit again. "CODE" appears on the red display.
- Enter the new code by means of the buttons 1 - 4 (as described in chapter "Entering the code").
- Press first the left part and then the right part of the rocker switch. On the display the word "Car" blinks for approx 3 sec. After this period, the first input position for the car registration number blinks. Should you wish to change the entry of the car registration number, proceed as described in chapter "Entering the car registration number". If you do not wish to enter the car registration number,

- press the left and the right part of the rocker switch successively.

The new code is stored and the unit switches over to the station tuned in last.

Changing the car registration number

For changing the entry of the car registration number it is necessary to decode the unit as described in chapter "Erasing the code".

Enter the new number as described in chapter "Entering the car registration number".

Power supply was interrupted

If the power supply to the set was interrupted (e. g. after theft or repair), the car specific data will be displayed for 8 seconds per level when the unit is switched on.

Thanks to these data one can easily see who is the owner of this set.

Then, the set prompts the correct entry of the numeric code. For this,

- press the button 1 ⑨ as often as required until the first digit is set.
- Press the buttons 2, 3 and 4 as often as required until the display shows the specified code.
- Press the left part of the search tuning rocker switch.

If the input is correct the unit can be operated. If the input is wrong "----" is shown in the display for 10 seconds.

After incorrect input do not operate the unit before having checked the code (car radio ID card).

Changing the display colour

With radio operation the basic background colour of the display can be selected between red and green to match the lighting of the car.

Should you wish to change the basic background colour,

- switch the car radio off,

- press and hold the right part of the rocker switch for the red basic colour and the left part for the green basic colour.
- Then switch the set on before releasing the rocker switch.

The display appears in the chosen colour.

Care and maintenance

Care of cassettes and unit

Handle your cassettes and unit carefully. We recommend to use C 60/C 90 cassettes.

You may expect less wear and tear of the cassette mechanism and better operation behaviour from a cassette produced by a leading manufacturer.

Metal, ferrous oxide, chromium dioxide, and ferrichrome cassettes can be used.

Protect your cassettes against dirt and dust by keeping them in suitable containers.

Heat exceeding 50°C, e.g. when exposed to direct sunlight, may damage your cassettes. At temperatures below 0°C, do not start playback of your cassettes before they have warmed up sufficiently.

This helps to avoid irregular tape transport. Constant wear of the tape soils the cassette mechanism. Therefore, the head, the rubber pressure rolls, and the capstan shaft are to be cleaned so that a trouble-free reproduction and function of the cassette unit is ensured.

These parts should be cleaned with a **cotton pad dipped in alcohol**. Never use hard tools for cleaning. After approx. 50 hours of operation, the unit should be examined and thoroughly cleaned by an expert (see "Clean"). This maintenance work is not part of the service covered by our guarantee conditions.

CLEAN

The unit is provided with a Clean-Timer. The overall operating time of the cassette mechanism is evaluated and indicated for a short time on the display by pressing the button Clean ⑧.

Having exceeded the period of 50 hours (overall operating time), the display indicates „CLEAN“ for approx. 5 sec each time a cassette is inserted.

After this period essential components of the cassette mechanism e.g. tape head, capstan shaft, rubber pressure roll should be cleaned by an expert.

Up to 90 hours can be indicated.

Having cleaned the unit, set timer to "0".

- For this, press the button CLEAN for about 5 sec.

Technical Datas

Output power:

2 x 24 W or 4 x 6,5 W rms

acc. to DIN 45 324/3.1 connected to 4 Ω

FM:

Sensitivity: 0,9 μ V at 26 dB

signal to noise ratio

Frequency response: 35 - 16 000 Hz - 3 dB
(constant)

Selectivity: > 80 dB at \pm 300 kHz
> 40 dB at \pm 200 kHz

Cross-talk attenuation: > 30 dB at 1 kHz

Cassette:

Frequency response: 30 - 18 000 Hz - 3 dB
(constant)

Wow/Flutter: 0,2 % typ.

S/N ratio: 72/64/56 dB typ.
for Dolby C/B/without Dolby

Preamp-Out: Output impedance 150 Ω

Aux-in: Input impedance 10 k Ω

