

## Operating instructions



## Barcelona RCM 104 A



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## Quick instructions

### ① **Switching on:**

Press the **ON** button (the KeyCard has to be inserted), the set plays with the pre-adjusted volume.

### **Switching off:**

Press **ON** for approximately 1 second. If the set was turned on by pressing **ON**, the KeyCard can be used for switching the system on and off. Please read the information of chapter "Key-Card".

The set may also be turned off via the vehicle's ignition (provided that it was connected correspondingly). After the ignition was switched off, a double beep tone reminds you that you should remove the KeyCard before leaving your vehicle.



To operate the set when the ignition is switched off (KeyCard is inserted), proceed as follows:

Press "ON" after the double beep tone. The set will be turned on.

To avoid that the battery goes flat, the system will be turned off automatically after a playback time of one hour.

### ② To change the **volume:**

Press **VOL+/VOL-**.

Each time the set is switched on, it will play with the pre-adjusted volume (VOL FIX). You may also change the VOL FIX setting (see chapter "DSC programming").

### ③ **FMT**

Press this button to switch between the memory banks I, II, and T (Travelstore). As soon as this button is pressed, the system will automatically switch to FM.

### **Extra function:**

Store the six most powerful stations automatically with **Travelstore:**

Press **FMT** until seek tuning starts in the display.

### ④ **M•L**

To change between medium wave (MW) and long wave (LW) frequencies.

### ⑤ **-dB** - for instantly changing the volume. Press the **-dB** button to instantly mute the audio source. The display will then show MUTE. Return to normal volume by pressing either the **-dB** or the **VOL+** button.

When pressing **VOL-**, the normal playback volume is identical to the **-dB** (muted) volume.

To program the mute volume, proceed as follows:

- Adjust the desired volume.
- Press **-dB** for approximately 2 seconds (beep tone is released).

This volume will then be stored as the mute volume.

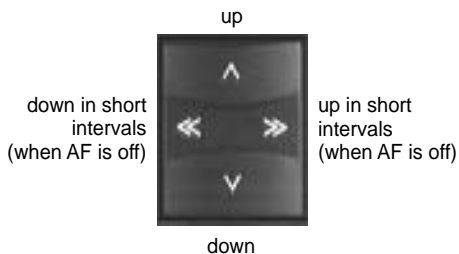
### **Extra function:**

Press this button to store the values set in the DSC menu.

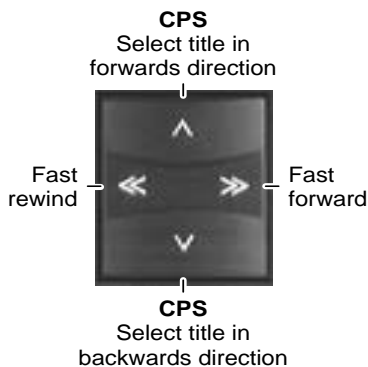
## ⑥ Rocker switch

Radio operation

### Station search



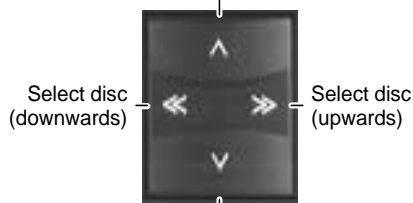
Tape operation



To stop the function:  
Press the opposite button.  
^/v or << >>

Changer operation

**Selecting a track (upwards):** Press briefly  
**CUE - fast advance (audible):**  
Press and hold down



**Repeating a track:** Press briefly  
**Selecting a track (downwards):**  
Briefly press twice or more  
**REVIEW - fast reverse (audible):**  
Press and hold down

**Extra functions:**

**AUD** see ②4

**GEO** see ②5

**DSC - MODE** see ②2

Select function and program parameter.

**AF - MODE** "AF" in the display  
Use the << >> buttons to scroll through the programs of a radio

network, e.g. from NDR1 to NDR4 (North German broadcaster).

## ⑦ Display

Radio mode



Station name (RIAS/DSK)  
Waveband  
Memory bank (FM I)

Cassette mode



TR 1 (track 1)  
Dolby B NR

CD mode (option)



Disc number, title number

## ⑧ KeyCard

In order to operate the set, the Key-Card has to be inserted.



For this purpose, introduce the **Key-Card** (contact area showing up) into

the corresponding slot above the Key-Card tongue.

Read also the information given in the "KeyCard" chapter.

- ⑨ **AF** button (**alternative frequency**) during **RDS** operation  
When "AF" lights up in the display, the system will automatically seek a frequency offering better reception of the same RDS program.

"AF" on/off: Press the **AF** button briefly. When pressing the **AF** button for about 2 seconds, the display will show REG-ON or REG-OFF (see also chapter REG - Regional).

- ⑩ **PTY** button (**Program Type**)  
Activates the PTY mode. In the PTY mode, the station buttons become program buttons, for programs such as NEWS, SPORT, POP MUSIC, SCIENCE, etc.

- ⑪ **TIM/TA**  
**TIM** (**Traffic Memo**)  
To play all the stored traffic announcements:  
Press TIM briefly.

To activate/deactivate the priority for traffic announcements:

Press TIM for approximately 2 seconds.

**TA** (**Traffic Announcement**)

If TA lights up in the display, the system will only play traffic stations.

**TA on/off:** Press the TIM button for approximately 2 seconds.

**Note the warning under "Traffic Memo (TIM)".**

- ⑫ **1, 2, 3, 4, 5, 6 - preset buttons**  
You can store 6 stations on each FM memory bank (I, II, and "T") and another 6 stations on MW and LW each.

**To store a station:** Press button during radio operation and hold down until the radio comes on again.

**To recall a station:** Select the waveband. On FM, select the desired memory bank and press the corresponding preset button.

- ⑬ **PS**  
**Preset Scan**  
Press button briefly to scan the stations stored on the preset buttons.

## SCAN

For briefly playing all receivable stations or the titles during tape or changer operation (option).

To start/stop Scan: Press **PS** for approx. 2 seconds.

The scan time can also be altered (see chapter "DSC programming" - SCANTI-ME).

- ⑭ **RM** (**Radio Monitor**)  
Press this button to listen to the radio while fast forwarding or fast rewinding the tape.  
During tape operation:  
To switch RM on/off: Press **RM**.  
When this function is activated, the display shows "RM".  
The radio is played during fast tape run.

- ⑮ **B•C – Dolby B•C NR**  
This set allows you to play back tapes that have been recorded with Dolby-B NR, Dolby-C NR or without Dolby noise reduction.  
Press **B•C** to adjust to the type of Dolby NR in which the tape was recorded or to disengage Dolby NR. When Dolby is active, the corresponding indicator "B" or "C" will light up.

①6 **Eject button**

Press ▲ .

①7 **Cassette loading slot**

Insert tape (side A or 1 facing up, the open side showing to the right).

①8 **Tape side selector**

Press Δ∇ to switch over during tape operation. The display shows “TR 1” (track) or “TR 2”.

①9 **MIX**

→ see chapter “CD changer control”.

②0 **BLS (Blank Skip)**

Use this function to skip blank sections of the tape.

As soon as an unrecorded portion of more than 15 seconds is detected during playback, the system will automatically forward the tape to the beginning of the next title.

In this case, the display will show “CPS-FF”.

To switch BLS on/off: Press the **BLS** button.

When the function is active, “BLS” will light up in the display.

②1 **lo**

To change the seek tuning sensitivity. **lo** lit up in the display indicates normal seek tuning sensitivity (the system will only pick up powerful nearby stations). **lo** off indicates high seek tuning sensitivity (the system will also pick up weaker stations).

**To change the seek tuning sensitivity:** Press **lo**.

Using DSC it is possible to preset the seek tuning sensitivity for local (“S-LO”) and distant reception (“S-DX”). For more information read chapter “DSC programming”.

②2 **DSC (Direct Software Control)**

Use the DSC function to adapt a number of programmable basic settings to suit your listening preference. For more information, read through chapter “DSC programming”.

②3 **LD (loudness)**

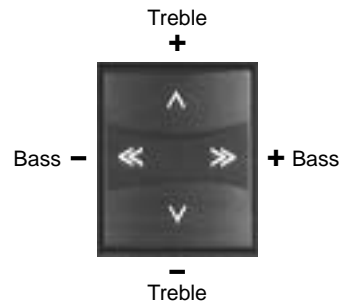
Use this function to boost the low frequencies for more bass, especially at low volume levels.

**To switch LD on/off:** Press the button. When the loudness function is activated, the display shows “LD”.

For more information, see chapter “DSC programming”.

②4 **AUD**

To adjust the treble and bass frequencies using the rocker button.

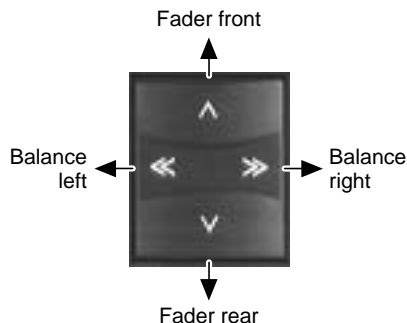


The last setting will be automatically stored.

If the setting remains unchanged within 8 seconds, the display will switch back to the previous indication.

**25 GEO**

To adjust the Balance (left/right) and Fader (front/rear) settings.



The last setting will be stored automatically.

If the setting remains unchanged within 8 seconds, the display will switch back to be previous indication.

**26 RT – Radiotext**

Use this function to display message texts transmitted by an RDS station. RT messages will only be displayed if the ignition is switched off. Turn on the set.

To switch RT on: Press **RT** and wait until the message text appears on the display.

To switch RT off: Press **RT**.

**27 SRC (source)**

To select between the connected audio sources, for example cassette, radio, or CD changer (option).

## Important notes

### What you really have to read

Before you operate your new car radio, please read the following information carefully.

### Traffic safety

As the driver of a motor vehicle, it is your responsibility to pay attention to the traffic situation at all times. Never use your car radio in a way that could distract you.

Please keep in mind that you travel a distance of 14 m per second at a speed of only 50 km/h.

Do not adjust your radio in difficult driving conditions that demand your full attention.

Always make sure that you are still able to hear any warning signals coming from outside of the vehicle, such as police or fire engine sirens, so that you can react accordingly.

### Installation/connection

In order to ensure that the set functions properly it is necessary that the positive power supply line is connected to the ignition and the permanent +12 V connector of the car radio.

If you would like to install your new car radio by yourself or add other audio components to the existing ones, then please read carefully the enclosed instructions on installation and connection.



Do not connect the loudspeaker outputs to ground!

Use only the accessory and replacement parts approved by Blaupunkt.

### **Optical indication of theft protection**

When the car is stationary, you can let the KeyCard tongue flash in order to indicate that the set is equipped with security coding. Use DSC to select one of two settings: LED ON or LED OFF.

For more information, please read through chapter "DSC programming - LED ON/OFF".

## **KeyCard**

The car radio can only be operated using either KeyCard 1 or 2. Their codes are stored in the unit.

Turn on the set and introduce the KeyCard completely. The car radio is now ready for operation. When inserting a wrong KeyCard, the display will show "----".

After approximately 10 seconds, "CARD ERR" will appear in the display. In this case do not make any further adjustments until you have the corresponding KeyCard available.

**Never try to pull out the KeyCard by force.**

First, slightly press the card in. This releases the KeyCard; the display shows "LEARNING". Now you can pull out the card. Should the KeyCard be lost or damaged, then please contact one of our authorised service partners to get a new card.

The service centres are marked (□) in the car radio service centre list. In case of doubt, please contact the central service centre in your country for more information on the KeyCard service centre closest to you.

Use either KeyCard (1 and 2) to individually store the following functions as desired: bass, treble, balance and fader settings, preset stations, loudness, TA (traffic announcement volume), SPEECH (tone control for speech programs), BEEP volume, SCANTI-ME, VOLFIX.

In addition to this, the settings activated before switching the radio off, such as the waveband, station, TA priority, loudness, AF, CPS, Dolby B/C, RM, REG ON/OFF or seek tuning sensitivity will also remain stored.

When you insert your KeyCard, the basic settings you have programmed will automatically be activated.

## **Replacing a KeyCard**

Any KeyCard can only be replaced by a new one with the same number (1 or 2). Should you wish to replace KeyCard 2, for example:

- Insert KeyCard 1 and switch the radio on.
- Slightly press the card and it will move into the removal position. "LEARNING" will then appear in the display.
- Remove KeyCard 1 and insert the new KeyCard 2 while the display is still showing LEARNING.

Now you can operate the set with the new KeyCard 2.

You can switch the radio on only after inserting either a KeyCard 1 or 2.

## Selecting the operating mode

With the SRC (source) button you can select between the following modes:

- radio,
- tape,
- CD changer (option), or
- operation of another audio component connected.

To select one of the operating modes, it is of course necessary that the corresponding system is available, i.e. the add-on component must be adequately connected and the sound carrier (cassette, disc, changer magazine) inserted.

To switch over to the next operating mode available,

- press the **SRC** button.

## Radio operation with ADA and RDS

### ADA

This car radio features **ADA** (Auto Directional Antenna).

The 2-fold ADA system developed by Blaupunkt incorporates two tuners (Codem IV concept) and sets new standards in reception quality, which is clearly superior to other systems.

With ADA, the set simultaneously analyses and processes the signals furnished by two antennas. Compared to traditional concepts, this leads to a considerable improvement in the radio reception quality.

Also, multipath interference effects (produced by hills or buildings) are minimised to an extent unparalleled so far.

### ADA on/off - antenna test

You can switch off ADA and test the antennas. For more information, read through chapter "DSC programming, ADA".

### RDS (Radio Data System)

The Radio Data System offers you more convenience when listening to FM.

More and more radio stations have begun to broadcast additional RDS information alongside their programs.

As soon as a radio program has been identified, the station name including a regional

identifier, if applicable, will appear in the display, for example "NDR1 NDS" (local radio program of Lower Saxony, Germany).

With RDS, the preset buttons become program buttons. Now you know exactly which program you have tuned into and in future you can select this program directly.

But RDS even offers you more advantages:

### AF - Alternative Frequency

The AF function makes sure that the radio will always tune into the optimum frequency for the RDS station you are listening to.

This function is activated if "AF" lights up in the display.

In order to switch AF on/off:

- Press the **AF** button briefly.

During seek tuning for the frequency offering the best reception of the selected program, the radio will be muted briefly.

When "SEARCH" appears in the display after the radio has been switched on or one of the stored frequencies retrieved, then the radio is automatically searching for an alternative frequency.

"SEARCH" goes out as soon as the system has found an alternative frequency or after the frequency band has been run through completely.

Should the reception quality of the selected program become too bad,

- tune into another program.

## REG - Regional

Certain radio programs are split up at times into regional programs offering local information. If you are listening to one program and move to an area where another linked regional program becomes stronger, the unit will switch to that program. If you wish to continue listening to the first station:

- Press the **AF** button for about 2 sec.  
The display will show "REG ON".

If you leave the service area of the regional station tuned into, or if you would like to take advantage of the full RDS service, then switch to "REG OFF".

- Press the **AF** button for about 2 sec. until "REG OFF" is displayed.

The display will show "REG ON" or "REG OFF" every time the radio is switched on.

## Selecting the waveband

This car radio can be used in any of the three following wavebands:

FM 87.5 - 108 MHz

MW 531 - 1602 kHz, and

LW 153 - 279 kHz

- Select the desired waveband by pressing the **FMT** or **M•L** button.

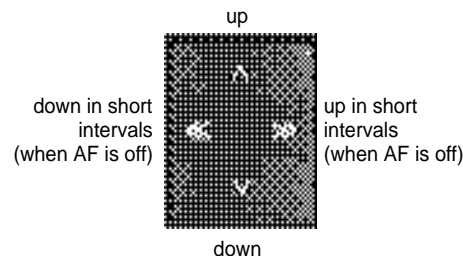
To switch between MW and LW:

- press **M•L**.

## Automatic seek tuning $\wedge/\vee$

- Press  $\wedge/\vee$ . The radio will automatically tune into the following station.

If you keep the upper or lower part of the rocker switch  $\wedge/\vee$  depressed, seek tuning speeds up in upwards or downwards direction.



## Manual seek tuning << >>

Prerequisite: **AF** is switched off!

- Press << or >> to change the frequency in small steps in upwards/ downwards direction.

If you hold down the right or left part of the rocker switch, then the car radio will move through the stations quickly.

## Adjusting the seek tuning sensitivity

The set allows you to modify the seek tuning sensitivity.

If "Io" is indicated, the radio will only pick up strong stations (low sensitivity).

If "Io" is deactivated, the radio will also pick up less powerful stations (higher sensitivity).

The degree of sensitivity can be separately adjusted for both levels (see chapter "DSC programming").

## Stereo - mono switch (FM)

If reception is poor, you may get better sound quality if you switch to mono:

- Press **Io** for approximately 2 seconds.

The stereo symbol  $\infty$  will disappear for mono playback.

Each time the car radio is switched on, stereo playback is activated.

The unit will automatically switch to mono playback under poor reception conditions.

## Changing the memory bank (FM)

You can shift between the memory banks I, II, and “T” to store and to recall preset stations. The selected memory bank is indicated in the display.

- Press **FMT** until the desired memory bank lights up in the display (press repeatedly if necessary).

## Storing stations

Using the preset buttons **1, 2, 3, 4, 5, 6** you can store six stations on each FM memory bank (I, II, T).

In the MW/LW range you can store six stations each.

- Select the waveband with the **FMT** or **M•L** button.
- Select a station with the rocker switch (either automatically  $\wedge/\vee$  or manually  $\ll \gg$ ).
- Press the desired preset button and hold it down. The radio will be muted and resumes play after approximately 2 seconds.

Now the station has been stored. The activated preset button is indicated in the display.

### Note:

Should you tune into a station which has already been stored, the corresponding preset button and the memory bank will start flashing in the display for a short while, if you have selected another memory bank.

## Storing the strongest stations automatically with Travelstore

You can use the Travelstore memory bank to automatically store the six strongest FM stations sorted on the preset buttons according to their signal strength. This feature is especially useful when travelling, because it will always give you the most powerful stations at a finger tip as you pass through the various reception areas.

- Press **FMT** for approximately 2 sec.

The radio will search for the six most powerful FM stations and store them on the “T” memory bank (Travelstore). When this process has been completed, the radio will tune in the strongest station.

FM stations can also be stored manually on the Travelstore memory bank (see “Storing stations”).

## Recalling stored stations

You can recall any stored station by pressing the corresponding preset button.

- Press **FMT** or **M•L** to select the waveband. For FM, also choose the corresponding memory bank by pressing **FMT** until the desired bank is indicated in the display.
- Briefly press the corresponding preset button.

## Preset scanning

You can have all of the stations stored in one waveband scanned by using the Preset Scan function. Choose the desired SCANTIME in the DSC menu.

- Briefly press **PS**.  
All of the stations in that waveband will be scanned one after another.

Depending on which memory bank has been activated for FM, all of the stations in either I, II or the Travelstore level will be scanned. If a preset is not in use, it is skipped.

To stop the scan:

- Press the **PS** button once again.  
The radio will continue to play the currently scanned station.

## Scanning stations with Radio Scan

Beginning with the station currently tuned in, you can scan the following stations. Choose the desired SCANTIME in the DSC menu.

### To activate the scan:

- Press **PS** for about 2 seconds. Either the scanned frequency or the station name starts flashing in the display. During the actual scan process, "SCAN" is flashing.

### To continue listening to a scanned station/switch the scan off:

- Briefly press **PS**.

If no station is selected during the scan, the scan function will be automatically switched off after the entire frequency band has been passed through. The radio will revert to the station the scan began from.

For more information, please also refer to chapter "DSC programming - SCANTIME".

## PTY – Program Type

PTY is an RDS service offered by more and more radio broadcasters. This feature allows you to select FM stations in accordance with their program type. As soon as you have chosen the PTY of your preference, the cor-

responding stations can be selected by seek tuning or with the scan function.

### Switching PTY on/off

- Press **PTY**.

When the function is active, the display will briefly show the program type selected last; "PTY" is permanently indicated in the lower right corner of the display.

## Program types

Use << >> to let the system display the program type selected last and to choose a new one.

You can select stored PTYs with the preset buttons 1 - 6. For this it is necessary that the PTY function is activated.

The program types listed below will then be available.

The letters printed in bold correspond to the actual PTY indication briefly displayed.

**NEWS**  
**CURRENT AFFAIRS**  
**INFORMATION**  
**SPORT**  
**EDUCATE** (education)  
**DRAMA**  
**CULTURE**  
**SCIENCE**  
**VARIED**

**POP MUSIC**

**ROCK MUSIC**

**M.O.R. M** (middle of the road music)

**LIGHT M** (light classical)

**CLASSICS** (serious classical)

**OTHER M** (other music)

**PTY 16 to PTY 30** are not yet assigned.

### Displaying the program type

- Press << or >>. The program type selected last will be briefly displayed.

### Selecting a program type

- a) Using the preset buttons  
If PTY is switched on, you can select the program types assigned at the factory with preset buttons 1 - 6. If you would like to store other PTYs, read through chapter "DSC programming - PTY SET".
  - Press one of the buttons 1 - 6. The display shows the selected program type for three seconds.
  - Press  $\wedge/\vee$  while the PTY is displayed: This will start seek tuning for a station offering the specified program type.

b) Using the << >> rocker switch

If PTY is switched on, you can select a program type via the << >> rocker switch.

- Press << or >>. The PTY selected last will be displayed for three seconds.
- During this period choose the desired program type with << (backwards) or >> (forwards direction).
- Press << or >> as many times as required.

### Tuning into a station with PTY

You may let the system find you the stations offering the adjusted program type using the seek tuning rocker switch or the PS (SCAN) button.

Precondition: "PTY" must be illuminated on the display.

- Press <<>> or PS.

Seek tuning will stop at the first station offering the desired PTY.

If you have pressed PS (SCAN), the stations received will be scanned once until you switch SCAN off again (press PS once again).

### PTY priority

When PTY is activated, the system will constantly search for the corresponding program type within the station network of the received program.

If you listen to NDR2, for example, the set will also search through the other NDR programs to find out whether there is a program offering the desired PTY.

During radio operation, as soon as such a program begins the unit will switch over to this program for the duration of the corresponding broadcast.

During tape or CD operation, the system will release a BEEP and display the program type in order to let you know that a program offering the desired PTY has started.

- If you wish to listen to this program, press SRC to switch to radio operation.

### Note:

As mentioned before, the PTY function is presently not available with all RDS stations.

### Station naming

Using the ST NAME item of the DSC menu you can enter a name with a maximum of 8 digits for all stored frequencies of memory banks I and II.

Most of the FM stations are RDS stations, the names of which will be shown in the display.

The displayed RDS name has priority over all entries specified by the user. If you have named an RDS station, this name will only be shown briefly and be replaced by the RDS name afterwards.

For this reason we recommend that you only name non-RDS stations, which only show their frequency but not the name.

All long-wave stations are provided with a station name at the factory.

To start your entry:

- Choose a station,
- press **DSC**,
- select item "ST NAME" with rocker switch ^/∨ and
- press **-dB**.

The first position is flashing.

- Now select a character with rocker switch ^/∨.

You have the choice between the capital letters (A-Z), special characters and the numbers (0-9).

# Reception of traffic announcements with RDS-EON

- Use the rocker switch << >> to move to the next position and select a character.

In this way, up to 8 characters can be entered.

Once you have completed the name as desired,

- press **-dB**;  
now the entry has been stored.

The display returns to “ST NAME”.

To name the next station:

- Select it with one of the preset buttons (1-6); if required, change the memory bank and/or waveband.  
Then start to enter the next name.

To finish the entry,

- press **DSC**.  
You will leave the DSC menu at the same time.

Any name entered for a preset station will be deleted by re-assigning it (either with a name or frequency).

## (Enhanced Other Networks)

Many FM broadcasters provide their service area with traffic messages at regular intervals.

All traffic program stations transmit a special telegram signal alongside their programs, which is recognised and decoded by the car radio.

As soon as such a signal is received, the display shows “**TP**” (Traffic Program).

Other radio stations do not actually air traffic announcements themselves, but by using RDS-EON they make it possible to receive the traffic announcements of another station within the same radio network. In this case, “**TP**” will light up in the display as soon as the priority for traffic announcements is activated. The display must then show “**TA**”.

If a traffic announcement is broadcast, the radio will automatically switch to the linked traffic program for the duration of the message and return to the original program after the end of the message.

## Traffic announcement priority on/off

If the priority for traffic announcements is activated, “TA” will appear in the display. To switch the function on/off:

- Press the **TIM** button > 2 sec.

## Warning beep

If you leave the reception area of the traffic program station you are currently listening to, you will hear a warning beep after approximately 30 seconds.

This warning beep will also be released when pressing a preset without a traffic program.

## Switching the warning beep off

- a) Tune to another traffic program station:
  - Press the rocker switch, or
  - press a preset button with a station offering traffic information.

Alternative:

- b) Switch off the priority for traffic announcements:
  - Press **TIM** > 2 sec.  
In the display, the “TA” indication goes out.

You can reduce the beep tone volume to the pre-selected mute volume.

- For this purpose, press **-dB**.

## Traffic Memo (TIM)

### Automatic seek tuning start

Prerequisite:

The priority for traffic announcements is activated. If you leave the reception area of your traffic program while listening to a tape or disc or when having turned down the volume completely, the car radio will automatically tune into another traffic program station.

If no such traffic program station is found within approximately 30 seconds, tape or disc reproduction will be interrupted and the system will release a warning beep. To switch the beep off, proceed as described above.

### Adjusting the traffic message volume

The volume of the warning beep and of the current traffic message was pre-adjusted at the factory. If you would like to alter the setting, proceed as described under "DSC programming - TA LEVEL".

This set is equipped with a digital speech memory, allowing up to 4 traffic messages lasting a maximum of 4 minutes to be automatically recorded.

As soon as "TP" is displayed, the system will record all incoming traffic announcements of the adjusted station.

If the priority for traffic announcements is activated ("TA" lights up in the display), the set will also record the traffic messages of the traffic station program within the same radio network (see also "Reception of traffic announcements with RDS-EON").

Depending on the length of the new traffic bulletin, the oldest messages will be deleted. If a message is longer than four minutes, the system will display OVERFLOW after four minutes of playback, and release a beep tone to indicate that the message could only be recorded partially.

#### Warning

**The motor antenna could be damaged in a car wash.**

If you have installed a motor antenna, then please take into account the corresponding warning note at the end of this chapter.

### Recalling stored traffic announcements

- Press the TIM button briefly.

The display for example shows: NDR2 (station name or frequency), then briefly **T4 14.30** (T4 = traffic message 4, recorded at 14:30). If four traffic messages were recorded, then "T4" always represents the most recent announcement, which will also be played first.

Use the  $\wedge/\vee$  rocker button to switch between T1 and T4.

Hold down the  $\wedge/\vee$  rocker button to move through the message in forwards/backwards direction quickly.

Press << to go back to the beginning of the currently played message.

The TIM function is switched off by either pressing TIM or >>.

### TIM standby mode when the radio is turned off

With this system it is possible to record incoming traffic announcements automatically at pre-determined times when the radio is turned off.

You may then recall such messages as described above.

If you press the TIM button while a traffic announcement is being played (TA lit up in the display), the recording will be interrupted.



When pressing TIM once again, you will hear the message text recorded until that interruption.

### Setting the time in the DSC menu:

TIM needs the exact time in order to operate precisely. The time also has to be re-adjusted after every interruption of the power supply.

- Press **DSC** and the time will be displayed.
- Press << to set the hours or >> to adjust the minutes.

The corresponding value is flashing. To change the setting,

- press the rocker button  $\wedge/\vee$ .

To confirm your entry,

- press **-dB** or **DSC**.

When pressing the -dB button, you can go on working in the DSC menu immediately.

### Adjusting the TIM standby mode/TIM time

The TIM-TIME to be set corresponds to the planned departure time. TIM will then be active 1.5 hours before and after this adjusted time, so that the traffic messages will be recorded during a period of three hours.

Note: During this period, a motor antenna will remain extracted. Please take into account the warning note of the end of this chapter.



The motor antenna will be extracted

- Use the rocker button  $\wedge/\vee$  to choose TIM-TIME in the DSC menu.
- Press << or >> to call up the adjusted time. If TIM OFF is displayed, the TIM function is deactivated.
- Use the rocker button  $\wedge/\vee$  to set the time.
- Use << to move to the hours or >> to adjust the minutes.

Confirm your entry by

- pressing **-dB** or **DSC**.

The TIM-TIME is stored.

TIM will be active 1.5 hours before and after the adjusted TIM-TIME.

Also, TIM will automatically stay on standby for three hours after the radio was turned off.

When TIM is activated, the display will briefly show "TIM ON" when the set is switched off.

### Deactivating the TIM standby mode

- Press DSC with the radio being turned on.
- Use the  $\wedge/\vee$  rocker button to select the item **TIM TIME**.
- Press **-dB** and switch to **TIM OFF** with rocker button  $\wedge/\vee$  (you find this item between the time settings for 23:00 and 0:00).

When TIM OFF is flashing,

- press **DSC** or **-dB**.

If the motor antenna is retracted immediately after selecting TIM OFF, you can be assured that the TIM function is deactivated.

#### Note:

If the TIM function is not used for a longer period of time, we recommend you to switch it off in order to avoid that the battery goes flat.

### ⚠ Warning

**The motor antenna could be damaged in a car wash.**

If you have a motor antenna installed, it will remain extracted after you have turned off the radio with the TIM function being activated. The antenna may also be extracted in the car wash when the set is turned off and the TIM function activated.

**TIM is deactivated (TIM OFF), if the motor antenna is retracted as soon as the set is turned off.**

**You can now drive through a car wash when the radio is off.**

Do not switch on the radio until you have left the car wash.

If the display shows TIM ON when switching off the radio, then the TIM timer is activated. The motor antenna will remain extracted.

**If you are sure,**

that now and while being in the car wash you are outside the recording period around the adjusted TIM-TIME:



The motor antenna will be extracted

- Switch off the radio and press **TIM**. The display briefly shows STBY OFF.

The antenna will then remain retracted when the radio is turned off (until the three-hour recording period starts).

Attention:

**You should by all means deactivate the TIM timer (TIM OFF), if the adjusted recording period is soon to start.**

For this purpose:

- Press DSC with the radio being activated.
- Use the  $\wedge/\vee$  rocker button to select the item **TIM TIME**.
- Press **-dB** and switch to **TIM OFF** with rocker button  $\wedge/\vee$  (you find this item between the time settings for 23:00 and 0:00).
- If you now turn off the radio, the antenna will be retracted.

You can now drive into the car wash. After you have left the car wash, you may re-activate the TIM function according to your preference.

## RT – Radiotext

Radiotext is an RDS feature used by the broadcasters to transmit texts.

The texts can be displayed in two subsequent lines with a maximum of 64 characters each, which are moved through the display slowly.

Depending on the individual broadcaster, these texts can be of a different nature, for example brief news, program information, commercial broadcasts, etc.

For safety reasons, the radiotext function can only be used if the ignition is switched off.

When activating **RT** with the ignition being switched on, the message “NO TEXT” will appear in the display.

To read radiotext messages, proceed as follows:

Park the vehicle in a suitable place and turn off the ignition. The radio will be switched off automatically.

- In order to re-activate the car radio, press the ON button for about 1 second.

- Select a station and press **RT**.

It takes some time until the aired messages are fully available in the system. In the meantime, the radio will display the message “WAIT”.

Afterwards, the text will be displayed.

If the adjusted station does not provide radiotext information, the message “NO TEXT” is displayed.

To switch off radiotext:

- Press the **RT** button once again.

## Tape operation

In order to play a tape, the car radio has to be switched on.

The unit automatically switches to tape operation when a cassette is inserted.

### Inserting a tape

- Turn on the set.
- Insert the cassette.

The cassette is automatically transported to the playback position. The system then starts to play back side A or 1.

During tape operation, the display shows TR1 or TR2 (=track)

Insert cassette with side A or 1 facing up, the open side facing to the right

Eject cassette

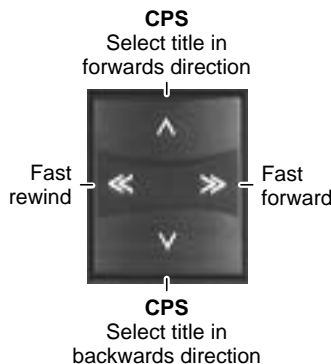


### Removing a tape

- Press ▲ .  
The cassette will eject.

### Fast forward/rewind

- Press >> to fast forward a tape (FF).
- Press << to fast rewind a tape. (FR)



To stop the function:  
Press the opposite button.  
<< >> or ▲/▼.

### Selecting titles with CPS (Cassette Program Search)

Use this function to repeat or skip cassette titles with buttons ▲ (forwards) or ▼ (backwards).

The system allows you to skip up to 9 titles.

For this purpose,

- press the rocker switch as many times as required.

The display will show you the number of titles to be skipped.

Correct your entry by pressing the opposite button.

Press ▲▼ to stop the tape immediately.

For CPS operation it is necessary that there is a blank section of at least 3 seconds between the titles.

### Autoreverse

To switch sides while playing a cassette,

- press ▲▼.

At the end of a side the unit will automatically switch over. The display shows "TR1" for side 1 or "TR2" for side 2.

#### Note:

If there is too much tension on the tape during playback, the set may switch over by itself. In this case check the condition of the tape. Sometimes it helps to rewind the cassette tape completely.

### Tape type detection

Correct equalization is automatically selected according to the tape used.

## Scanning cassette titles with SCAN

You can have the cassette titles played briefly by using the scan function. If you like a title, stop the scan to continue listening to that track.

To start/stop the scan:

- Press **PS** briefly.

Choose the desired SCANTIME in the DSC menu.

## Dolby B•C NR\*

Use this button to play tapes recorded with Dolby noise reduction.

Dolby-C NR is a further development of Dolby-B NR and reduces the unwanted tape noise even more.

Press **B•C** to adjust to the type of Dolby NR in which the tape was recorded or to disengage Dolby NR. When Dolby is active, the corresponding indicator “B” or “C” will light up.

\* Noise reduction system manufactured under license from Dolby Laboratories. “Dolby” and the double-D symbol are trademarks of Dolby Laboratories.

## Skipping unrecorded tape sections with BLS - Blank Skip

As soon as the system detects a blank tape section of more than 15 seconds, the cassette will automatically be fast forwarded to the beginning of the next track.

The display will then show “CPS-FF”.

To switch BLS on/off:

- Press **BLS**.

If the function is active, “BLS” appears in the display.

## Listening to the radio during fast winding with RM (Radio Monitor)

When the tape is fast forwarded or rewound (also with CPS, SCAN, BLS), the radio is normally muted. To listen to the radio during fast winding:

- Press **RM**.  
“RM” lights up in the display.

## Care of your audio equipment

We recommend that you use only C-60/C-90 cassette tapes in your car radio. Store your cassettes in a cool place away from dirt, dust and temperatures exceeding 50 °C. During cold weather, allow very cold cassettes to warm up before playing them in order to avoid uneven tape transport. Operating problems and sound distortions may occur after approximately 100 hours of playing time and are caused by dust particles which adhere to the rubber roller and the audio head.

Use a cleaner cassette to remove normal dirt build-up. For tougher cases, use a cotton swab (Q-tip) soaked with alcohol. Do not attempt to clean the mechanism by inserting a hard object into the player!

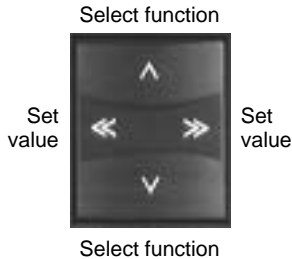
# DSC programming

Using DSC (Direct Software Control), you can adjust certain settings and functions for this car radio to your own liking and then store them.

The basic settings for this audio equipment have been made at the factory. Please refer to the following overview for these settings so that you can always reset to these if desired. If you wish to alter any of the programming,

- press button **DSC**.

Use the rocker switch and the **-dB** button to make your selection from the following functions and to carry out the desired adjustments. The current setting for that function will appear in the display.



## TIME

The current time will be displayed, or it has to be adjusted.

Use the rocker button << >> to select the hours or minutes (flashing), and the ^/∨ switch to set the time. Start with **-dB**. The precise time setting is required for the proper operation of TIM.

## CDC NAME

(only if changer is connected)

Use this function to name your discs (see also CD changer control, "Entering/ displaying CD names")

## ADA

To switch the ADA system on/off and to test the antennas.

Use the <<>> rocker switch to activate one of the following modes: ADA OFF, ANT 1 X, ANT 2 X, ADA ON X. The "X" stands for a number between 0 and 9, depending on the intensity of the antenna signal.

## Test

If the antenna signal intensity between ANT(enna) 1 and ANT 2 still varies strongly even after having changed the vehicle position (by metres), you should have the antenna furnishing the weaker signal checked.

## ADA ON/OFF

Normal setting: ADA ON. If only one antenna is connected, you should adjust ADA OFF.

## ANGLE

Use one of the values -1, 0, or +1 to adapt the individual viewing angle. Adjust the ANGLE so as to provide the best view.

## BAS F=R

To distribute the bass level among the front and rear speakers between +6 dB front and +6 dB rear.

## TRE F=R

To distribute the treble level among the front and rear speakers between +6 dB front and +6 dB rear.

**BEEP** This sound will confirm functions which are completed by pressing a button for longer than 2 seconds. Adjust volume between 0 and 9 (0 = OFF).

**BRIGHT** You can adjust the display brightness from values between 1 and 16. You can also select one day and one night adjustment. Selecting the night brightness:  
Switch on the vehicle's lighting system and program the brightness value. The audio equipment must be connected with the vehicle lighting for this to function properly.

**COLOUR** Step-by-step adjustment of the display colour.  
G ..... II ..... R  
green red

**CDC DISP** (only if changer is connected)  
During CD operation, use <<>> to select between the following displays:  
NAME - the CD name specified with CDC NAME  
TIME - the playback time  
NUMBER - the CD or track number

**LED ON** You can select between LED ON and LED OFF. When setting LED ON, the Key-Card tongue will flash for additional optical theft protection when the set has been switched off and the KeyCard removed.

**LOUDNESS** When listening at a low level, the loudness function will create a more natural sound by emphasizing the low frequency range.  
LOUD 1 - low boost  
LOUD 6 - strong boost

**PTY LANG** Use this function to select the language for the PTY indications in the display. Choose between DEUTSCH or ENGLISH.

**PTY SET** Use this function to change the default allocations of the preset buttons. Press the preset button to be changed. Use the rocker switch <</> to select the desired program type and press the preset button once again.

**SCANTIME** Use this function to specify the scan time for the radio or cassette mode from between 5 and 30 seconds.

**S-DX 1** Use this function to adjust the seek tuning sensitivity for distant reception.  
DX. 1 - high sensitivity  
DX. 3 - low sensitivity

<b>S-LO 1</b>	<p>Use this function to adjust the seek tuning sensitivity for local reception.</p> <p>LO 1 - high sensitivity LO 3 - low sensitivity</p> <p>The seek tuning sensitivity values can be separately adjusted for AM and FM.</p>	<b>TIM TIME</b>	<p>To adjust the TIM time.</p> <p>To activate/deactivate TIM. For more information, see chapter "Traffic Memo (TIM), Adjusting the TIM standby mode).</p>
<b>SPEECH</b>	<p>In future many RDS broadcasters will differentiate between music and speech programs. Use the SPEECH function to separately adjust the sound settings for speech programs.</p>	<b>CDC UPD</b>	<p>(only if changer is connected)</p> <p>Use this function to delete disc names in order to get new memory capacities for other CD names (see also CD changer control, "Deleting CD names")</p>
<b>ST NAME</b>	<p>With this function you can name any preset radio station with a character sequence of up to 8 digits (see "Station naming").</p>	<b>VOL FIX</b>	<p>Use this function to adjust the initial volume when the set is switched on.</p> <p>Use &lt;&lt;&gt;&gt; to adjust the desired initial volume.</p>
<b>TA LEVEL</b>	<p>Use this function to adjust the volume for the traffic announcements and the warning beep from between 1 and 9.</p> <p>The announcement will then be broadcast at this volume.</p>	<p><b>To quit the DSC mode and store the setting:</b></p> <ul style="list-style-type: none"> <li>• Press <b>DSC</b>.</li> </ul>	

## CD changer control (option)

This car radio allows it to remote control one of the following Blaupunkt CD changers: CDC-A03, -F03, -A05, -F05.

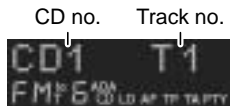
### Switching the CD mode on using SRC of the car radio

Be sure that a CD magazine is inserted in the changer. Use the **SRC** button to change the audio source (radio - changer - cassette). Press **SRC** until the changer functions appear in the display.

First, "CD ON" is displayed briefly, then for example

**CD1 -T1**

**CD** = disc, **T** = track

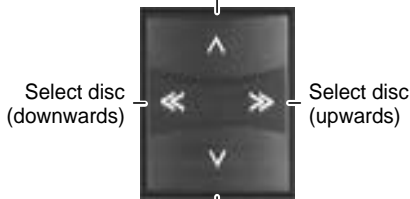


The display mode name/time or number can be selected under CDC-DISP in the DSC menu.

### Selecting a CD/track using the rocker switch

**Selecting a track (upwards):** Press briefly **CUE - fast advance (audible):**

Press and hold down



**Repeating a track:** Press briefly

**Selecting a track (downwards):**

Briefly press twice or more

**REVIEW - fast reverse (audible):**

Press and hold down

The display shows the selected mode.

### SCAN

Use this function for briefly sampling the CD tracks.

**To start the scan:**

- Press **PS** on the car radio for approximately 1 sec. The tracks will be briefly played in ascending order.

**To stop the scan:**

- Press **PS** briefly. The radio will continue to play the title scanned last.

### MIX

Use this function for playing the CD tracks at random.

**MIX CD** – The tracks of the selected CD are played at random. The following CDs are selected in numeric order. Their tracks will also be played at random.

**MIX MAG** – All tracks of the CD magazine are played at random.

**MIX OFF** – MIX is switched off. The tracks are played in numeric order.

To change the MIX mode:

- Press **MIX** until the desired mode is briefly shown in the display.

If MIX is on, "MIX" will appear in the lower right corner of the display.





## Entering/displaying CD names

With this system you can name up to 99 CDs. When playing a CD, the display will then give you the entered name, for example

“VIVALDI”.

Precondition: NAME must be selected under DSC - CD DISP.

To enter the name:

First, switch off the priority for traffic announcements. Otherwise the entry will be deleted if an announcement is broadcast. Press the **TA** button to switch the “TA” display off.

Be sure that at least one CD is inserted in the CD magazine.

- Press **SRC** to change to CDC.
- Press **DSC**.
- Press the rocker switch  $\wedge/\vee$  until “CD NAME” is displayed.
- Press the **-dB** button.

The first character position is flashing.

- Use the rocker switch  $\wedge/\vee$  to enter the first letter, special character or digit from 0-9.
- Use the rocker switch  $\langle\langle\rangle\rangle$  to change to the next position and select a character.

Each name may have up to 7 characters.

To finish the entry:

- Press **-dB**. The entry is stored and you can now select another DSC function using the rocker switch  $\wedge/\vee$ .

Alternatively:

- Press **DSC**. The entry is stored and the DSC mode is automatically quit.

To store the entry/choose the next CD:

- Press **-dB** and select the next CD to be named using  $\langle\langle\rangle\rangle$ .
- Press **-dB** and enter a name.

Any specified name will be deleted by re-assigning it with a new CD name.

## Deleting CD names

If you try to store more than 99 CD names, “FULL” will be shown in the display. In this case you can use DSC to delete the name of one or more CDs in order to get new memory capacity.

Use the CDC-UPD function to confirm all CDs, the names of which you wish to maintain. All the other names will be deleted.

- Press **DSC**.
- Insert a magazine with the CDs, the names of which you wish to maintain.
- Press  $\wedge/\vee$  until “CDC UPD” is displayed.

- Press  $\langle\langle\rangle\rangle$  and “LOAD CD” is displayed.

After having read in the CDs of this magazine, “NEXT MAG” appears in the display.

- Press the **EJECT** button on the CD changer and insert the next magazine.

Repeat these steps for all CDs, the names of which you wish to maintain.

- To finish your entry, press **-dB** for about 2 sec. until “UPDATING” is displayed. The updating process is completed when the display shows “READY”.

The names of all CDs inserted in the magazine remain stored in the memory. The other CD names have been deleted.

You can interrupt this process by pressing **DSC**.

# Appendix

## Survey of DSC default settings

TIME	00:00
ADA	ON
ANGLE	0
BAS	F=R
TRE	F=R
BEEP	4
BRIGHT	16
COLOUR	Medium position (orange)
CDC DISP	NAME
LED	ON
LOUDNESS	3
PTY LANG	DEUTSCH
PTY SET	NACHRICH (TEN)
SCANTIME	10s
S - DX	1
S - LO	1
SPEECH	0
TA LEVEL	5
TIM TIME	07:00
VOL FIX	26

## Technical data

### Amplifier:

Output power: 4 x 20 watts RMS acc.  
to DIN 45 324  
4 x 25 watts music  
power acc. to  
DIN 45 324

**FM sensitivity:** 0.7  $\mu$ V at 26 dB  
S/N ratio

### Frequency response:

**FM** 35 - 16,000 Hz (-3 dB)  
**Tape (metal)** 30 - 18,000 Hz (-3 dB)

We reserve the right to make changes!



**Blaupunkt-Werke GmbH**  
**Bosch Gruppe**

K7/VKD 3 D94 147 028