

BMW CAR RADIO
BAVARIA C BUSINESS RDS

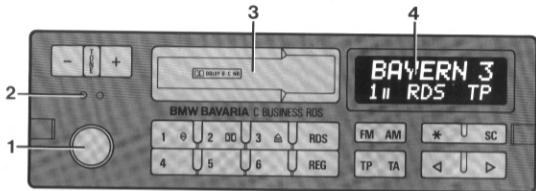


This operating manual is available in
the following languages:

| | |
|---------|---------------------|
| German | No. 01 20 9 786 090 |
| English | No. 01 21 9 786 091 |
| French | No. 01 22 9 786 092 |
| Spanish | No. 01 23 9 786 093 |
| Italian | No. 01 24 9 786 094 |
| Swedish | No. 01 25 9 786 095 |
| Dutch | No. 01 26 9 786 096 |
| Danish | No. 01 27 9 786 097 |

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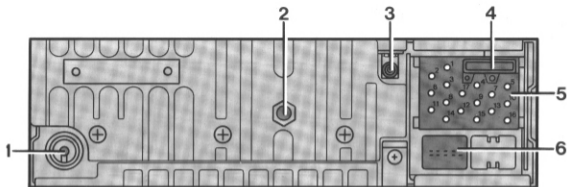
Order No. 01 21 9 786 091
English VIII/91
Printed in Germany



Display and control elements

- 1 On/off switch, volume control
 - 2 LED for thiefproofing function
 - 3 Cassette slot
 - 4 Display
(Display of wavelengths, station in the case of an RDS station, channel, frequency, station search sensitivity, station key, tone setting, cassette and CD operation)
- TONE** Selector key for tone, loudness, balance and fade control
- Tone adjustment
 - + Tone adjustment
- 1...6** Memory/station keys, code number entry, CD selection
- ⊕ Track selection
 - ⊞ Noise reduction selection
 - ⏏ Cassette eject

- RDS** Radio Data System
- REG** Regional station operation
- FM** VHF (memory levels I and II)
- AM** Medium wave, long wave
- TP** Traffic Program (station identification for traffic reports)
- TA** Traffic Announcement (muting switch for announcement identification)
- *** Function key
(selection of manual frequency input, CD operation and functions)
- SC** Station search with scan function
- ◀▶** Station search key



Back of radio/control unit

- 1 Aerial connection
- 2 Attachment
- 3 Aerial diversity connection
- 4 Flat-type fuse, 5A
- 5 Connecting bushing for:
 - Front left loudspeaker + (1)
 - Front right loudspeaker + (2)
 - Rear left loudspeaker + (3)
 - Telephone muting (4)
 - Positive terminal R (5)
 - Rear right loudspeaker + (6)
 - Front left loudspeaker - (8)
 - Permanently positive terminal 30 (9)
 - Speedometer signal for speed-dependent volume control (10)
 - Front right loudspeaker - (11)
 - Rear left loudspeaker - (12)
 - Lighting terminal 58g (13)
 - Rear right loudspeaker - (14)
 - Earth terminal 31 (15)
 - Automatic aerial and windscreen aerial amplifier or Sound/HiFi amplifier (16)
 - (Connections 7 and 17 are not in use)
- 6 Connection for CD 6 Selektion CD changer

Equipment and functions

Radio operation

- FM (VHF), AM (MW/LW) radio reception
- 12 memory slots for FM, 6 each for MW/LW
- RDS function in FM range:
Stations are displayed by name and if appropriate by channel number. Whenever a station can be picked up over various frequencies, the frequency with the best reception quality will be automatically selected.
- REG operation in FM range:
A regional channel is selected.
- Station search with automatic or manual fine tuning
- Automatic station search with scan function
- Manual frequency selection
- Traffic reports with station identification (TP = Traffic Program) and Traffic Announcement (TA) when the sound is muted.
Audible signal if it is impossible to pick up a traffic-report station.
Volume raising for traffic reports if output volume is muted or very low.
Volume control for traffic reports.

Tone setting

- Separate treble and bass controls
- Loudness:
Treble and bass are raised at low volume settings
- Fade control:
Adjustment of balance between front and rear loudspeakers
- Balance:
Volume balance of left-hand and right-hand loudspeakers

Cassette operation

- Automatic and manual track reversal
- Motor-driven cassette ejection
- High-speed fast-forward and rewind
- Music search function in either direction
- Dolby* B and C noise reduction
- Automatic tape grade selection and display
- Automatic cleaning display
- Cassette interruption for traffic reports

* Dolby and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.
Noise Reduction System manufactured under license from Dolby Laboratories Licensing Corporation.

CD operation

- Selection function for up to 6 CDs
- Title browse in either direction
- Rapid forward and reverse skip
- Title search with scan function
- Random play:
The set plays titles at random
- CD interruption for traffic reports
- Temperature warning

Electronic theftproofing function

- Code-type theftproofing
- LED for anti-theft protection

Auxiliary equipment

- CD changer (BMW BAVARIA CD 6 SELEKTION)
- Aerial diversity:
With more than one aerial fitted, the set broadcasts the signals from whichever aerial is receiving the best signal.
- Speed-dependent volume control
- Telephone muting:
The volume is automatically lowered when the telephone is in use. Muting is slightly lifted when traffic reports are being broadcast.

Radio operation



Tone setting



Cassette operation



CD operation



Thiefproofing function



Warranty conditions



Tuning to a station

via automatic search



Switch on radio: press volume control.



Select desired waveband.

A different waveband is selected every time the key is pressed:

AM – between MW and LW

FM – between FMI and FMII

Display:



Press key or hold it down.

To the left: descending frequency sequence.

To the right: ascending frequency sequence.

Only strong stations are sought during the initial run; if a second run is necessary, fainter stations will also be sought.

Sensitivity level selection:

Low sensitivity:



Press key once.

High sensitivity:



Press key twice.

Display:



■ strong station

■■ faint station



Tone setting – see Page 12 for details.

Via scan search



Switch on radio: press volume control.



Select desired waveband.

A different waveband is selected each time the key is pressed:

AM – between MW and LW

FM – between FMI and FMII



Press key.

Stations with strong reception are sought in ascending frequency sequence and are audible for about 8 seconds.

Display:



In order to continue listening to the station scanned:



Press key again or press * or <> keys.



Tone setting – see Page 12 for details.

Via manual frequency selection



Switch on radio: press volume control.



Select desired waveband.

A different waveband is selected every time the key is pressed:

AM – between MW and LW

FM – between FMI and FMII



Press function key.

Display:



Press key within 8 seconds or keep it pressed down for rapid search.

To the left: descending frequency sequence.

To the right: ascending frequency sequence.



Tone setting – see Page 12 for details.

RDS station reception

RDS (Radio Data System) is a broadcasting and receiving system in the VHF range which sets reception alternatives and displays the station names.

The information is transmitted by the stations via five signal codes:

- Program Identification **PI**
- Program Service name **PS**
- Alternative Frequencies **AF**
- Traffic Program **TP**
- Traffic Announcement **TA**

Even in the most unfavourable of conditions, Alternative Frequency selection ensures the best possible reception within a certain reception area.

If a station which transmits RDS information is picked up, the frequency is displayed first and then after the information has been evaluated the station name will appear.

The radio always selects the best frequency from the alternatives being picked up. A certain amount of time is needed to evaluate this information, depending on the strength of the signal being received.

Note:

If the reception quality of the station being picked up decreases and there is no other frequency available, the radio begins a search which is indicated in the display with **SEARCH**.

If no interference-free alternative is available or if the signal is too weak, the frequency continues to be displayed.

In order to turn the RDS function on or off:



Press key.

In order to set the desired station:



Press key or **SC** key or the * and <D> keys.

Display:



Flashing up the frequency display:



Keep the – and + keys pressed down at the same time.

To display the frequency permanently:

Press * and **FM**.

Picking up a regional channel

Certain stations divide their main channels up into regional channels either throughout the day or at specific times.

Regional channel splits can be identified by fluctuation between more than one frequency on the same channel, as if the set were faulty, as a result of the station switching to different frequencies or overlapping.

If a regional channel decreases in reception quality despite the RDS function, bear in mind that regional channels usually only broadcast on a small number of frequencies. There is therefore little scope for the receiver to locate regional channels on frequencies which offer better reception.

Selecting the desired regional channel:

 Press key.

A regional channel's reception may be displayed in an abbreviated form, such as BR2 OBB*.

Display: 

* OBB = Oberbayern (Upper Bavaria)

Note:

If the REG function has been switched on and the station changes, a search automatically takes place, displayed as **SEARCH**.

Traffic report reception

Switching on and off:

 Press key.

Display: 

Only stations which also transmit traffic announcements are audible in the VHF range. The radio automatically searches for one of these stations and TP flashes. Cassette or CD operation is interrupted for the duration of a traffic report.

If the TP key has not been pressed, a **T** appears in the display whenever a traffic-report station has been picked up.

To set a different traffic-report station:

 Press key or **SC** key or ***** and **<D>** keys.

Only strong stations are sought during the initial run; if a second run is necessary fainter stations will also be sought.

Once the reception area of a traffic-report station being picked up has been left, the radio automatically finds a new traffic-report station.

If no such station is available, a warning signal will be sounded briefly and the radio switches back to the frequency previously tuned to.

Setting the traffic report's volume:

Turn the volume control to set the desired volume during the traffic report. The last setting is stored in the memory.

Muting

Switching on:



Press key when the traffic report function has been selected.

Only traffic reports are now audible.

Display:



Removing muting:



Press key again or select a different waveband or another operating mode, or press after having switched the set off. Press TP key in the cassette or CD mode.

Memorizing stations

12 VHF (FMI/FMII), 6 MW and 6 LW stations can be stored in the memory.



If the radio has been switched on, select desired waveband.

A different waveband is selected every time the key is pressed:

AM – between MW and LW

FM – between FMI and FMII

Set desired station:



Press key or **SC** key or ***** and **<▶** keys.



To memorize the station, press one of the station keys **1...6** until the station becomes audible again following a brief interruption.

If the key has already been assigned, the old memory briefly flashes up.

Display:



When the RDS function is operating, a station should only be memorized once the name is displayed.

Recalling a memorized station



Select desired waveband.

A different waveband is selected every time the key is pressed.

AM – between MW and LW

FM – between FMI and FMII



Press desired station key **1...6**.

If the station recalled cannot be picked up temporarily, the radio automatically starts to search.

Display:



Tone setting



The choice of tone settings in the display changes between BASS TREBLE FADE CONTROL BALANCE LOUDNESS, depending on how many times the key is briefly pressed.

To change the setting:



Press – or + keys or keep them held down.

As the setting is altered, the scale changes.

Display:



LOUDNESS is switched on by pressing the + key and switched off by pressing the – key.

Average setting for bass, treble, balance and fade control



Keep key pressed down for longer than 2 seconds.

This results in an average setting, **LINEAR** appears in the display.



Setting the volume: turn the volume control.



Cassette operation

Switch on set and insert cassette into cassette slot as far as it will go, with the tape facing the right. The set switches to cassette operation and begins to play. Cassette reproduction is displayed:



The set recognizes the type of cassette inserted – chromium dioxide (CrO₂) and metal (FE) cassettes are displayed by **CR**.

Stopping cassette operation



Press key

or

switch to CD operation.

The electric motor ejects the cassette, which can then be removed.

or

turn ignition key to position 0

or

switch off set.

The cassette remains in the cassette player. When the set is switched on again, it is automatically in the cassette mode.

Setting noise reduction



Depending on the number of times the key is pressed, the set changes between **DDB**, **DDC** and Dolby (no display).

Tape track selection



Press key.

(Track 1 is the top and track 2 is the bottom side).

When the tape has finished, the other track will automatically be played.

Fast forward



Press key twice.

>> is displayed.

The other track will be automatically played when the tape has finished.

To interrupt fast forward:



Press key.

Fast rewind



Press key twice.

<<R appears in the display. If the tape has been rewound to the start, it automatically switches to replay.

To interrupt rewinding:



Press key.

Advance to next title



Press key.

> appears in the display.

The tape is advanced to the next title and switches to replay.

The other track is played when the tape has finished.

To interrupt advance:



Press key.

Note:

To operate title search, there must be a break of at least 4 seconds between the titles for the purposes of identifying the next piece of music.

Repeating title



Press key.

◀R appears in the display.
The tape is rewound to the title just played and switched to replay.

To interrupt rewind:



Press key.

Note:

To operate title search, there must be a break of at least 4 seconds between the titles for the purposes of identifying where the music begins.



Tone setting – see Page 12 for details.

Cassette cleaning

After approx. 15 hours of cassette replay, the message **CLEAN** appears in the display. The message disappears after a cleaning cassette (see also general notes, Page 16) has been run through twice.



General notes on cassette operation

Pure iron (metal), ferrous oxide, chromium dioxide and ferrochrome cassettes are suitable for use.

C60 and C90 cassettes or **special car cassettes** are recommended for use.

To avoid tape damage or tangles, always keep tapes **in the proper boxes or holders**, which have devices **to lock the spools**.

At extremely high or low outside temperatures, for example below -10°C or above $+40^{\circ}\text{C}$, do not leave cassettes in a parked car as they may become distorted and fail to operate when next played.

In addition, all cassettes must be protected against direct sunlight and dust, and the tape wound completely onto one spool for storage.

Distorted reproduction is normally a sign that the tape is not running smoothly and freely.


In this case, remove the cassette immediately to avoid damage.

If a loop of tape has formed, it can be taken up by turning one of the spools with a suitable object such as a ballpoint pen.

Insert the cassette back into the slot and wind it completely through from one end to the other, so that the tape is wound onto the spool uniformly and at the correct tension.

The sound reproduction quality of cassettes deteriorates in the course of time as a result of unavoidable deposits and dust on the tape head. The drive elements inside the cassette player also become dirty. Cleaning is therefore needed at regular intervals. Take the cassette out of the slot and remove dirt from the tape head and drive elements with an appropriate cleaning cassette (autoreverse cleaning cassette for both directions, normal cleaning cassettes have to be changed over) or a cotton-wool swab dipped in cleaning fluid. Never use a hard object.

CD operation

 Press key twice when the set has been switched on:

The equipment switches to CD operation. Play begins after a few seconds at the place last interrupted. CD reproduction is displayed:

TRACK 12
DISC 3

Ending CD operation

 Change to radio operation

or

change to cassette operation

or

turn ignition key to position 0

or

switch off set.

Changing the CD




Press the desired CD number key (1...6).

The CD is loaded and its number displayed. Replay begins at the first title, the number of which appears in the display.

See Page 20 if the following messages appear: NO DISC, CHECK DISC, NO MAGAZINE or ERROR. If there is no replay although none of these messages appears, press cancel key on the CD changer, see Page 20.

Fast forward

 Briefly press key, then before about 8 seconds have elapsed,


 keep key pressed down until forwarding has ended.

The CD can be heard during fast forward and >> appears in the display, as does the appropriate title number.

If the end of the CD has been reached, it automatically starts to play the first title again.

As long as >> is displayed, it is possible, after having interrupted fast forward, to press the > key again to start.

Fast reverse

 Briefly press key, then before about 8 seconds have elapsed,

 hold down key until reverse should have ended.

It is possible to hear the CD during reverse and <<R appears in the display, as does the appropriate title number.

If the start of the CD has been reached, it automatically switches to play.


As long as <<R is displayed, it is possible, after having interrupted reverse, to press the < key again to start.

Forward search

 Press key.

Play begins at the start of the next title

or

 press key as many times as required.

Play begins at the start of the appropriate title

or



keep key pressed down.

After the key has been released, play begins at the start of the title selected.

The appropriate title number is displayed.

Once the end of the CD has been reached, the first title is again played.

Reverse search



Press key.

Play begins at the start of the title just heard.

or



press key as many times as required.

Play begins at the start of the appropriate title.

or



keep key pressed down.

After the key has been released, play begins at the start of the title selected.

The particular title number is displayed.

If the start of the disc has been reached, the last title on the CD is played again.

Scan search



Press key.

10 seconds of the titles of the CD chosen are played in a forward direction.

SCAN appears in the display as does the relevant title number of the title just heard.

If the end of the CD has been reached, the first title is again played.

To interrupt SCAN search:



Press key or press <> key or * key.

Random play



Press keys one immediately after the other.

The titles on all the CDs are automatically played in random order.

RND and the relevant CD and title numbers appear in the display.

To interrupt random-play operation:



Press one of the CD selector keys 1...6 or press the * key or **SC**.

Temperature warning

If the temperature range at which perfect CD operation is guaranteed is exceeded or undercut, **HIGH TEMP** or **LOW TEMP** is displayed.

Display:



Resume CD operation only if the temperature is within the recommended range and the display message disappears (see General Notes on Page 22).



CD changer

The **BMW BAVARIA CD 6 SELEKTION** CD changer is housed in the boot.

The CD magazine can hold 6 CDs.

Removing the CD magazine



Press key:

The CD changer opens automatically.

Press key again:

The magazine is ejected and can be removed.

Filling and emptying the CD magazine

The CD compartments are numbered by analogy to the CD selector keys.



Ejecting the CD compartment.

Insert CD with the printed side face down and re-insert the CD compartment.

There must always be a CD in the top compartment.

It is not recommended that single CDs with an appropriate adapter be played as the CDs or the adapter could become jammed.

Ask your local dealer for suitable magazines for single CDs.

The CD magazine can be emptied in the same way as filling.

Inserting the CD magazine



Press key:

The CD changer opens automatically. Insert the CD changer as far as it will go, with the arrow pointing towards the CD changer.

Fold up the CD changer lid to close.

Caution:

When filling or emptying the CD magazine, always hold the CDs by the edges only; never touch the mirror-finish centre section of a CD.

Notes:

If an empty magazine is inserted or if a CD compartment is not used, the message **NO DISC** appears in the display.

CHECK DISC appears in the display while the magazine's disc contents are being read.

If a CD is faulty or inserted upside down (printed side facing up), **ERROR** appears in the display to show that the CD cannot be played.

If no magazine is inserted, **NO MAGAZINE** appears in the display.

Resetting all functions:



Use a pen to press cancel key.

Connections on the CD changer

Control unit

Permanently positive terminal 30

Fuse 3A

Transit keepers

- Before installing, slacken off and remove the four screws (red head) included for safe transport and keep them in a safe place.
- Remove transit pin for the laser (secured by an adhesive strip) and again keep in a safe place.

Installed position

Depending on the installation position, adjust as set out in the notes given on the side.



- Remove screw 1.
- Use a screwdriver to alter setting.
- Use screw 1 to secure inside the new hole.

Note:

V = vertical installation

H = horizontal installation



General notes on CD operation

The CD changer is guaranteed to function correctly at temperatures from 0° C to 60° C.

You are therefore recommended only to operate the CD changer once the interior temperature has reached the given temperature range, otherwise it could malfunction.

The absolute temperature range of -25° C to 85° C must not be exceeded, even when the set is switched off.

Although CDs have a special protective coating on both sides, they should always be treated with care.

Always hold a disc by the edge only, taking care to keep the mirror-finish centre section free from fingerprints, dust, scratches and moisture. Do not write on the discs or apply adhesive labels to them.

Clean discs occasionally before playing. Use commercially available cleaning cloths to wipe the mirror-finish side with straight strokes, from the centre outwards.

Never use solvents, abrasive agents or cleaning agents and anti-static sprays intended for vinyl records.

Do not leave discs lying exposed after playing; always return them to their boxes. Please note the care instructions supplied by disc manufacturers.

If discs attract condensation (e.g. as a result of sudden changes in temperature), interference may occur.

High humidity inside the set may cause condensation on the focusing lens for the laser beam, with the result that the disc cannot be read.

If **HIGH TEMP** or **LOW TEMP** appear, switch off the set.

Only when humidity has returned to normal levels can a disc be played.

Precautionary measures when using laser equipment

The Bavaria CD 6 Selektion is a class 1 laser product.

If the cover is opened or is faulty or becomes damaged, invisible laser beams could escape.

Warning: **Do not remove the unit cover.**

In the interests of safety, only qualified service personnel should be authorized to perform maintenance work.

Thiefproofing

The radio can be encoded for protection against theft.

The four-digit code number is marked on the enclosed radio code card. Keep it in a safe place away from the car.

The LED for the thiefproofing device flashes once the ignition has been switched off.

You are recommended to apply the enclosed SAFETY stickers on the car windows in a clearly visible place.

When using for the first time or if the radio has been disconnected from the mains, it is necessary to re-enter the code number.

Entering the code number.

As soon as the radio is connected up to the vehicle's electrical system, the following message appears



Enter the four-digit code number via multi-function keys 1 (thousands) to 4 (units).

Every time a key is pressed, the value of the appropriate number increases by one.

Having entered the correct code number,



press key.

The set is now operable and automatically switches to radio operation, or to cassette operation if a cassette was inserted beforehand.

Note:

If the entry is incorrect, ---- appears in the display.

After two incorrect entries, **CODE** flashes.

After three incorrect entries, **WAIT** appears.

During the ensuing hour it is not possible to carry out any more entries. The set must not be switched off during this waiting time.

If the power supply is interrupted during this waiting time, the waiting time restarts and runs for a further hour.

CODE

Warranty conditions

Warranty cover is valid for 12 months from the date of purchase.

During the period of warranty cover, the set will be replaced free of charge by your BMW Service Station if found to be faulty.

Excluded from warranty are defects which have arisen from handling by unqualified persons, faulty installation, improper suppression, static charge or mechanical damage.

WARNING:

These appliances must not be opened, as otherwise warranty claims cannot be taken into consideration.





**The ultimate
driving
machine**

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