

**Operation Guide**

**ENGLISH**

**Mode d'emploi**

**FRANCAIS**

**Ferrari**

**FM/AM Cassette Car Stereo**

**FCR 10 Type 4372**

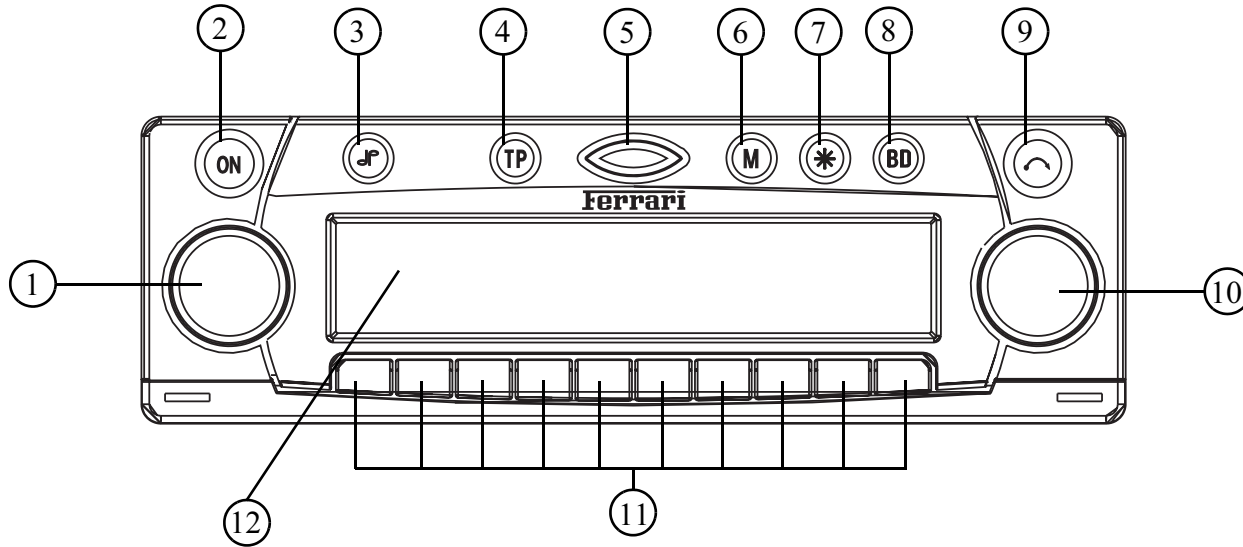
## Contents

<b>Contents</b>	<b>2</b>	FM 1/FM 2 station - retrieve/store	12
<b>Bottom Arrangements</b>	<b>4</b>	AM station - retrieve/store	13
<b>Anti-theft Device</b>	<b>5</b>	AM / FM autostore	13
Code number entry	5	Manual tuning	13
Remove portable panel	6	Traffic Program (TP)	14
Inserting portable panel	6	Traffic program station - display / select	14
<b>General Operation</b>	<b>7</b>	Announcement standby - switch on/off	14
Switch on / off	7	Telephone mute function	15
Adjust volume	7	Time request	15
Mute function	7	<b>Tape Operation</b>	<b>16</b>
Activate tone menu	7	Cassettes - insert / eject	16
Adjust bass	8	Track switching	16
Adjust treble	8	Radio operation during forward / rewind	16
Adjust balance	8	Fast forward / rewind	17
Fader	8	Music search - forwards / backwards	17
Loudness on /off	9	Dolby NR	17
Linear adjustment	9	Skip blank	18
Adjust mono / stereo	9	Scan - search	18
<b>Radio Operation</b>	<b>10</b>	Cleaning the cassette mechanism	18
Select operating mode	10		
Select waveband	10		
Switch on radio menu mode	10		
Setting procedures for station selection	11		
FM, AM station search	11		
Scan search	11		
Direct frequency input	11		
Program type display/search (PTY)	12		

## Contents

<b>CD/MD Changer Operation</b>	<b>19</b>
Compact Disc (CD) instructions	19
Operational readiness of CD/MD changer	19
CD magazine - load / unload	20
Playing CD/MDs	20
Track skip - forwards / reverse	21
Scan search	21
Fast forward / rewind	21
Relative time, number of tracks, total playing time	22
Random play	22
Direct track selection	22
<b>User Menu</b>	<b>23</b>
User menu - request / quit	23
DRIVER setting	23
User memory	24
LED setting	24
GAL setting	24
Telephone mute characteristics (PHONE)	25
Viewing angle setting (ANGLE)	25
Country setting (COUNTRY)	26
<b>Connection Instructions</b>	<b>27</b>
<b>General Instructions</b>	<b>28</b>
RBDS system	28
PTY (Program Type)	28
<b>Technical Data</b>	<b>29</b>

## Bottom Arrangements



- |   |  |    |                       |
|---|--|----|-----------------------|
| 1 | Volume control                           | 9  | Tape eject button (↶) |
| 2 | On / off switch (ON)                     | 10 | Right rotary control  |
| 3 | Tone button (J)                          | 11 | Multifunction buttons |
| 4 | Road traffic announcement button (TP)    | 12 | Display               |
| 5 | LED                                      |    |                       |
| 6 | Operating mode switching button (M Mode) |    |                       |
| 7 | Function button (*)                      |    |                       |
| 8 | Waveband switching button (BD Band)      |    |                       |

## Anti-theft Device

### Code number entry

If the car radio is disconnected from the power supply, it is theft-protected upon reconnection. After switching on at the **ON** button, the prompt **CODE**, followed by 4 stars is displayed.

The four-digit code must then be entered using the multifunction buttons “1-0”.

**Example :** Code number 1530 (the code number can be found on the enclosed CODE CARD).

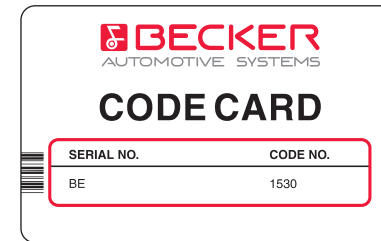
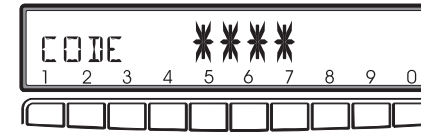
Enter code number using the multifunction buttons.

The first star is extinguished after entry of the first digit. The second star is extinguished after entry of the second digit, etc. The unit switches on automatically after entry of the 4th digit if this and all other digits have been correctly entered.

**Note :** It is essential that the CODE CARD be kept in a safe place outside the vehicle. Thus, illegal use is not possible. The accompanying sticker should be attached to the inside of the vehicle windshield/window.

If an incorrect code number is entered, the prompt **CODE** with the four stars is displayed again. After entering incorrect code three times **WAIT** is displayed and the unit is disabled for approx. 60 minutes. Three further incorrect entries block the unit again for 60 minutes.

**Note :** The waiting time applies only to ignition and unit switched on.



## Anti-theft Device

### Remove portable panel

As an effective anti-theft device, the portable panel (A) can be removed from the unit.

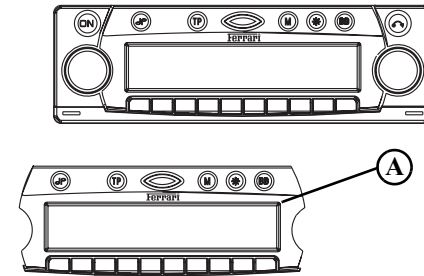
For this purpose, press and hold  button. The display folds forwards.

The portable component can then be pulled out.

The volume is limited to a maximum value after the display has been folded down. After 20 seconds an audible signal indicates that the control component is folded down. The unit is switched to mute. The unit switches off after a further 10 seconds.

**Note :** For safety reasons, it is not permissible to leave the portable panel open when driving

**Note :** Please insert the portable panel in the accompanying protective cover after removal.  
Do not touch the metal contacts on the portable panel or on the radio.



### Inserting portable panel

Insert the portable panel so that it engages first in the lower left catch and then in the lower right. Then press the portable panel into the upper catches.

Or position portable panel directly over all four catches and press in firmly to engage.

For proper functioning, ensure that the portable panel is firmly engaged in all four catches.

If a new portable panel or one from another unit is utilised, the code number must be entered, as previously described, in order to activate the unit.

## General Operation

### Switch on / off

Press **ON** button.

Further on / off switching possibilities: Via ignition. In order to switch on via the ignition, the unit must previously have been switched off via the ignition. After switching off the ignition, the unit can be prevented from switching off by pressing the **ON** button within 3 seconds.

**Note :** The unit can also be switched on with the ignition switched off via the **ON** button, but will switch off automatically after 1 hour.

### Adjust volume

Turn volume control to right / left. The volume is increased or decreased. The current volume level is shown on the display.



### Mute function

The unit can be switched to mute in each operating mode by pressing the volume control. **MUTE** appears on the display.

The mute function is cancelled by pressing the volume control, changing the operating mode, changing the waveband or inserting a tape/CD.



### Activate tone menu


Press **TP** button. The tone menu is activated. The following functions can be called up: **BASS** (Bass), **TREB** (Treble), **BAL** (Balance), **FAD** (Fader), **LOUD** (Loudness) and **STEREO** (Reception optimization).

Bass and treble settings for the AM/FM wavebands, for road traffic announcements and tape/CD operation are stored separately (values from -7 to +7). The settings for fader, balance and loudness (no loudness with AM) are stored together for all operating modes (values from -7 to +7).

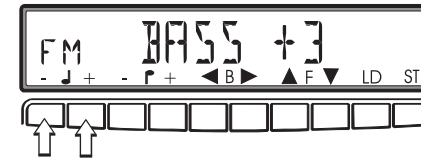


## General Operation


### Adjust bass

Press  button and then multifunction button “-” or “+”. **BASS** and the set value are displayed. Set the desired bass via both buttons.

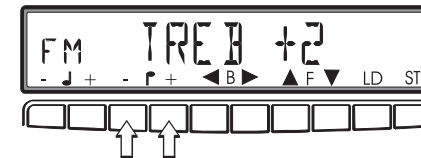
**Center setting:** Press both buttons simultaneously.




### Adjust treble

Press  button and then multifunction button “-” or “+”. **TREB** and the set value are displayed. Set the desired treble via both buttons.

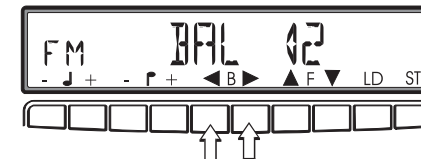
**Center setting:** Press both buttons simultaneously.




### Adjust balance

Press  button and then multifunction button “◀” or “▶”. **BAL** and the set value are displayed. Set the desired balance via both buttons.

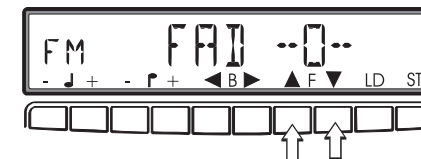
**Center setting:** Press both buttons simultaneously.



### Fader

Press  button and then multifunction button “▲” or “▼”. **FAD** and the set value are displayed. Set the desired fade level via both buttons.


**Center setting:** Press both buttons simultaneously.

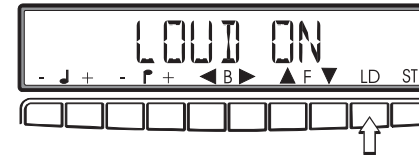





## General Operation


### Loudness on /off

Press  button and then multifunction button "LD". **LOUD ON** or **LOUD OFF** are displayed. The loudness can be switched on or off alternately by pressing the multifunction button.



### Linear adjustment

Activate tone menu. Then again press and hold  button for more than 2 seconds. The tone values for the set signal source (e.g. radio/FM) are set to an average value **FM LINEAR**.

Press and hold  button for more than 4 seconds. All tone values for the signal sources radio and tape / CD are set to an average value **ALL LINEAR**.



### Adjust mono / stereo

Three different reception optimisation settings can be set in order to suppress reception dependent interference and reflections.

Repeatedly press multifunction button "ST" in tone menu until the desired optimisation is set.

**AUTO:** Setting for normal operation - i.e., the unit switches from stereo to mono and back depending upon reception location (provides the optimum setting for almost all reception areas).

**STEREO:** Setting for unusual reception situations - i.e. the unit is set permanently to stereo (e.g. for private radio stations in city areas)

**MONO:** Setting for reception conditions in which reflections constantly occur - i.e., the unit is set constantly to mono.

The setting is effective immediately after pressing the multifunction button "ST" and is also retained on switching off.



## Radio Operation

### Select operating mode

Press **M** button. The operating modes **Radio**, **TAPE** or **CD/MD changer** (for connected CD/MD changer) can be selected.

The last selected operating mode is selected after the button is pressed for the first time. If the other operating modes are to be selected, press the **M** button quickly and repeatedly until the desired operating mode is selected.

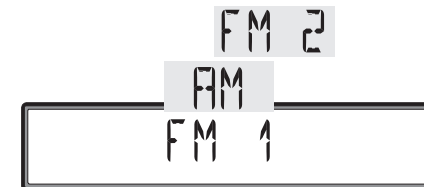
**Note :** If you switch often between **FM** and **TAPE**, first select **FM** and then through quick pressing **TAPE**. Subsequently, press the **M** button after a pause of more than 2 seconds, switching only takes place between FM and TAPE.



### Select waveband

Press **BD** button repeatedly until desired waveband **FM 1**, **FM 2** or **AM** is selected.

When changing the waveband, the last selected station is selected.



### Switch on radio menu mode

Press **\*** button. The radio menu mode is switched on and displayed. The unit switches back to the normal display if no buttons are pressed within the next 8 seconds.

## Radio Operation

---

### Setting procedures for station selection

The desired broadcasting station can be selected via station search, scan search, manual tuning, autostore, direct frequency input and station buttons.

### FM, AM station search

Turn the right rotary control to the left/right in desired waveband. The radio searches in descending/ascending order.

### Scan search

In the desired waveband (FM or AM) press the right rotary control, **SC** is displayed. An automatic station search is started. The first search is performed on an insensitive plane, all further searches on a sensitive plane. Receivable stations can be heard for 8 seconds. Press the right rotary control if the received program should be retained.



### Direct frequency input

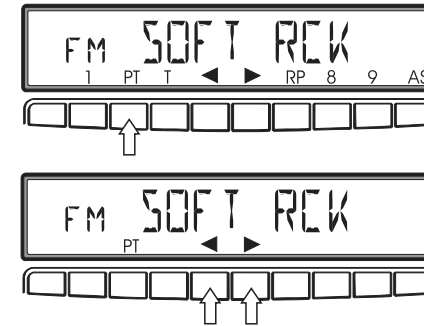
Select radio menu mode and then, within 8 seconds, enter the frequency using the multifunction buttons.

## Radio Operation

### Program type display/search (PTY)

Select radio menu mode and then and press multifunction button “PT”. The selected station program type is displayed for 10 seconds (e.g. **SOFT RCK** = soft rock). If the selected station has no PTY characteristic (see also page 28) **NO PTY** appears.

In order to activate search, select radio menu mode and then and press multifunction button “PT”. Pre-select the desired PTY code using the multifunction button “◀” or “▶”. Turn the right rotary control within the next 10 seconds. **PTY-SEEK** is displayed. The previous program is selected if no station with the selected PTY code is receivable. The unit switches to station button plane if there is no further actuation within 10 seconds.

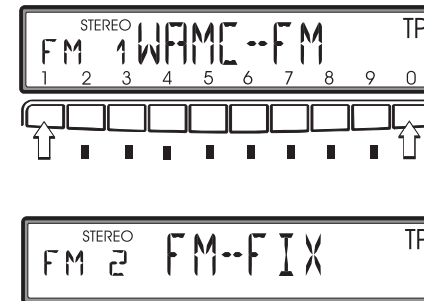


### FM 1/FM 2 station - retrieve/store

**Store:** 10 frequencies or programs can be stored on each of wavebands FM 1 and FM 2.

Press multifunction button for 2 - 4 seconds in order to store the desired station or program.

**Retrieve:** Press multifunction button “1 - 0”. The stored station is requested. The frequency is displayed if the station cannot be identified.

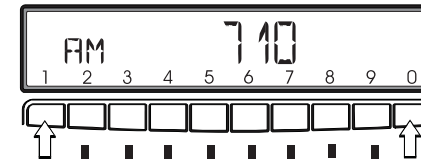


## Radio Operation

### AM station - retrieve/store

**Retrieve:** Press multifunction button “1 - 0”. The stored station is requested.

**Store:** 10 stations can be stored under station buttons. Search for the desired station and press the multifunction button until the station button number is displayed.

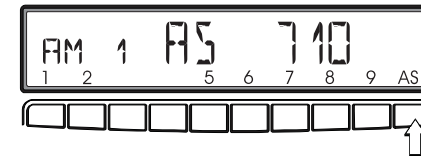


### AM / FM autostore

Select desired waveband. Select radio menu mode. Then press multifunction button “AS” repeatedly until **AS-SEEK** is displayed. The 10 stations with the best reception are stored under the station buttons in order of quality. The autostore plane is identified on the display by **AS**.

Select radio menu mode in order to quit the autostore storage plane.

Then press multifunction button “AS”. The radio switches back to the station button plane



### Manual tuning

Select radio menu mode and then turn the right rotary control.

Tuning steps of 200 kHz (FM) or 10 kHz (AM) are performed.

Pressing the right rotary control switches to fine tuning (1kHz steps) for AM.

The function is quit if there is no further actuation within 10 seconds.

## Radio Operation

### Traffic Program (TP)

The traffic program system offers the advantage that current traffic news can be received and heard despite the fact that Tape or CD/MDC are selected. For this purpose, it is essential that a traffic program station is selected in the FM waveband and that the traffic program is activated.

### Traffic program station - display / select

If a traffic program station is selected, the abbreviation **T** appears.

Press the **TP** button and a station search will begin to locate the next station broadcasting the TP identifier.

The station can also be selected by station search or by direct frequency entry.



### Announcement standby - switch on/off

If the selected traffic program station should interrupt the tape, CD/MDC operation for traffic announcements, the **TP** button must be pressed until the abbreviation **TP** is displayed.

If traffic announcements are not desired, the **TP** button must be pressed until the abbreviation **T** appears.

**Note :** During the traffic announcement, the desired increase in volume can be set via the volume button. An announcement which is currently being heard can be terminated by pressing the **TP** button. The unit then immediately switches back to the previously selected operating mode. However, the next traffic announcement is connected through again.



## Radio Operation

### Telephone mute function

The telephone characteristics can be set in the user menu (see also page 25) if a telephone system is installed in the vehicle and the mute function lead for the car telephone is connected to the car radio.

For the setting **PH OFF**, the radio is switched to mute if a call is received.

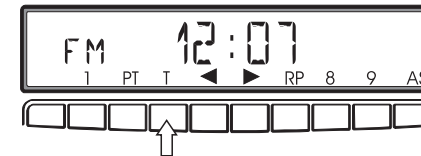
For the setting **PH ON**, the telephone sound is connected through the radio unit if a call is received.

However, this is only possible if, in addition to the telephone, a handsfree unit with loudspeaker output is installed and connected to the radio. In both cases, **PHONE** is displayed.




### Time request

Select radio menu mode in FM waveband. Then press multifunction button "T". The current time in hours and minutes is displayed. This display is only possible if the time signal is received via RBDS. If no time signal has been received, --:-- is displayed.





## Tape Operation

### Cassettes - insert / eject

Press  button briefly; the display folds downwards and the cassette slot becomes visible. Push in cassette with tape-side to the right until it engages and press lightly. The cassette is pulled in automatically. Then fold the display up again.

The unit switches automatically to cassette operation. **TAPE** and **TRACK 1** are displayed.

If there is already a cassette in the cassette slot, press  button repeatedly until **TAPE** appears on the display.

In order to eject a cassette, press  button briefly; the display folds downwards and the cassette is ejected and can be removed. Then fold the display up again.

**Note :** The cassette is not ejected when the unit is switched off but remains in the cassette slot.



### Track switching

The track is changed automatically at the end of the tape.

The tape track can be switched at any desired position by pressing briefly one of the multifunction buttons for track switching. The track currently playing is shown on the display.



### Radio operation during forward / rewind

During forward / rewind, the radio (FM) can be switched through by turning the volume control. Operation of the radio functions is, however, not possible.

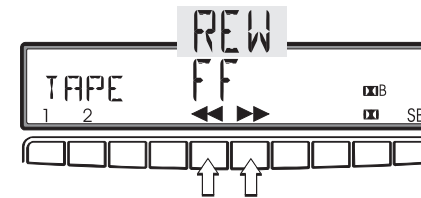


## Tape Operaiton

### Fast forward / rewind

During cassette operation, fast forward / rewind can be activated using the multifunction buttons.

In order to cancel the function, press or turn the right rotary control, or press the track switching buttons or the fast forward / rewind buttons.

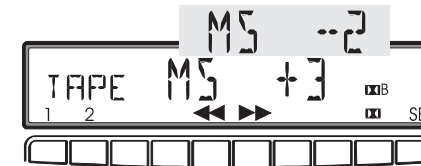


### Music search - forwards / backwards

In order to activate the forward music search, turn the right rotary control to the right until the desired number of tracks to be skipped (max. 9) is set.

In order to activate the backward music search, turn the right rotary control to the left until the desired number of tracks to be skipped (max. 9) is set.

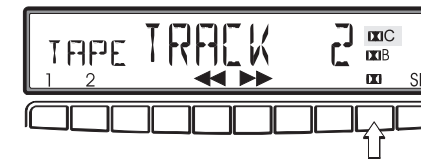
The beginning of a track can only be found if there is a pause of at least 4 seconds between tracks. In order to cancel the function, press or turn the right rotary control, or press the track switching buttons or the fast forward / rewind buttons.



### Dolby NR

For the playing of cassettes which have been recorded using Dolby NR, press the multifunction button repeatedly until the desired noise reduction mode (Dolby B or Dolby C) appears on the display.

For the playing of non-Dolby cassettes, press the button repeatedly until the Dolby NR display is extinguished.



## Tape Operation

### Skip blank

If skip blank is active, automatic forward is activated at blank tape sections which are longer than 10 to 15 seconds.

In order to activate the function, press the multifunction button "SB" until SB is shown on the display.



### Scan - search

Press the right rotary control to start the scan search.

SC appears on the display. Each track is played for approx. 10 seconds.

In order to cancel the function, press the track switching buttons or the fast forward / rewind buttons.



### Cleaning the cassette mechanism

After a time, the reproduction quality of cassettes is reduced due to unavoidable dirt and dust deposits on the sound head. The drive components in the cassette mechanism also become soiled. For this reason the cassette mechanism should be cleaned from time to time. The prompt CLEAN appears on the display after each 30 hours' running time.

Use a cleaning cassette suitable for reverse operation for this purpose. The cleaning cassette should be removed again after 30 seconds.

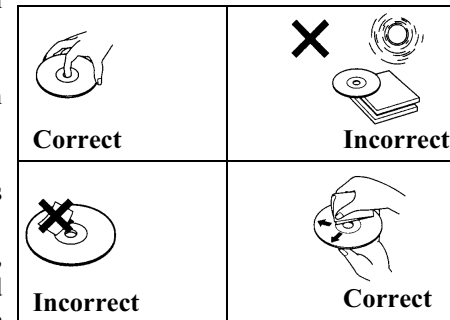


## CD/MD Changer Operation

### Compact Disc (CD) instructions

Sound interruptions may occur if the CD is soiled. In order to ensure optimum tone quality, please note the following:

- Always touch the CD at the edges only. Keep the CD clean and never touch the surface.
- Never stick anything on the CD.
- Protect the CDs against direct sunlight and from heat sources such as heaters, etc.
- Before playing, clean the CD with a commercially available cleaning cloth, wiping from the center outwards. Solvents such as petrol, thinners and other commercially available cleaners and antistatic sprays must not be used.



### Operational readiness of CD/MD changer

If a CD/MD changer is connected to the car radio, this is ready for operation as soon as it has been loaded with the filled CD magazine or with MDs. Close the sliding cover after loading. Further operation is performed via the car radio control panel.

## CD/MD Changer Operation

### CD magazine - load / unload

In order to remove the CD magazine, open the sliding cover on the changer and press the eject button. The magazine is ejected and can be removed.

When inserting CDs in the magazine, please note imprint on magazine.

**Note :** Incorrectly inserted CDs will not be played.

**Note :** In order to ensure the fastest possible CD change, the magazine should be fully loaded from compartment 1.

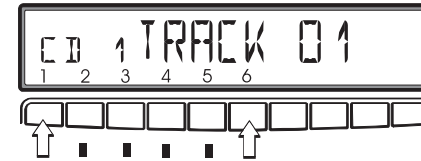
### Playing CD/MDs

Press **M** button repeatedly until the CD/MD changer operation is switched on. The last CD/MD which was being played, is played from the position in which it was left before switching off.

The desired CD/MD can be selected via the multifunction buttons "1 - 6". During the selection time **CD X LOADING** or **MD X LOADING** is displayed. Subsequently, the magazine compartment number and the number of the current track for the selected CD/MD are displayed.

If no CD/MD is present in the selected magazine compartment (e.g. compartment 2), **NO CD 2** or **NO MD 2** appears briefly on the display.

After playing the last track of a CD/MD, the next CD/MD in the magazine is automatically selected and played.



## CD/MD Changer Operation

### Track skip - forwards / reverse

Turn right rotary control to right / left.

If the track has been playing for longer than 10 seconds when the return function is triggered, a return to the beginning of the track takes place.

Through further turning of the right rotary control, several tracks can be skipped over in forward or reverse directions. Skip returns to the first track when the last track has been reached. Analogously, it jumps from the first to the last track.



### Scan search

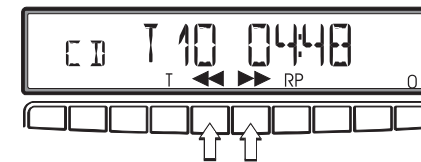
Press and hold the right rotary control, until the prompt **SC** appears on the display. All following CD tracks are played for 8 seconds each. Press the rotary control again to terminate the scan search.



### Fast forward / rewind

Press **\*** button after which fast forward (audible) is activated by pressing the multifunction button “▶▶” and fast rewind (audible) is activated by pressing the multifunction button “◀◀”. The relative time is displayed during this function.

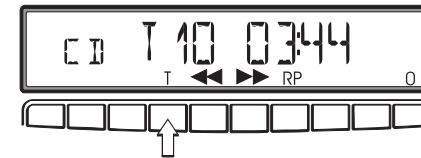
Fast forward / rewind is terminated by releasing the multifunction button. The relative time is displayed for a further 8 seconds.



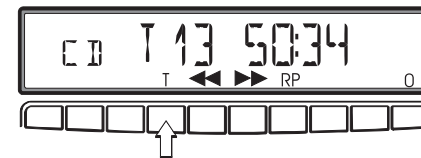
## CD/MD Changer Operation

### Relative time, number of tracks, total playing time

Press **\*** button after which by pressing the multifunction button “**T**”, the relative time for the track currently being played is displayed for approx. 10 seconds.



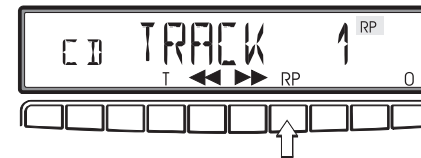
By again pressing the multifunction button “**T**” (within 10 seconds), the number of tracks and total playing time of the CD currently being played are displayed for approx. 10 seconds.



### Random play

Press **\*** button after which the random play is activated by pressing the multifunction button “**RP**”. The tracks of the current CD are then played in random order. The abbreviation **RP** appears on the display.

The random play function is terminated by repeated pressing of the multifunction button “**RP**”.

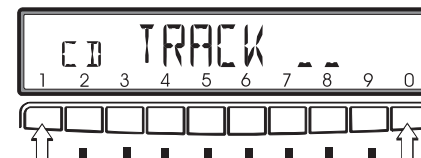


### Direct track selection

Press **\*** button after which the unit is switched to select mode by pressing the multifunction button “**0**”.

The digits **1 - 0** and **TRACK \_\_** are displayed.

A track can be selected directly by using the multifunction buttons “**1-0**”. The unit switches back to CD menu mode if no buttons are actuated for approx. 8 seconds.



## User Menu

### User menu - request / quit

After requesting the user menu, the following basic settings can be entered according to your personal preference.

- USER** - user memory
- SEEK** - search mode
- GAL** - speed dependent volume control
- DRIVER** - LHD / RHD setting
- PHONE** - telephone characteristics
- ANGLE** - viewing angle setting
- COUNTRY** - country setting
- END** - quit user menu



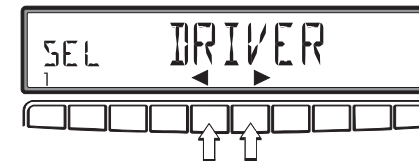
The user menu is requested by pressing the \* button for longer than 8 seconds. **SEL USER** appears on the display. Further actuation must take place within 4 seconds, otherwise the user menu is quit automatically.

In order to quit the user menu, set **END** using the right rotary control. The user menu is quit after 4 seconds.

### DRIVER setting

If a telephone system with handsfree unit is installed the telephone conversation is conducted via one loudspeaker side. The relevant loudspeaker side (LHD / RHD) is selected using the DRIVER setting.

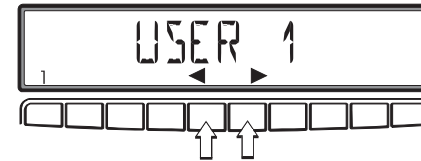
For selection, request user menu. Then set **DRIVER** using the right rotary control. Using the multifunction buttons "◀" or "▶" select between **DRV L** (LHD) and **DRV R** (RHD). The setting is stored automatically.



## User Menu

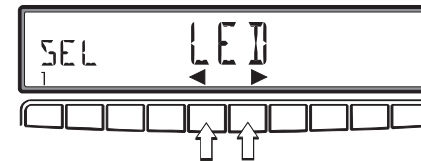
### User memory

Request user menu, then set **USER** using the right rotary control. Using the multifunction buttons “◀” or “▶” a choice of three different users is available. Both tone settings and the last selected station as the unit was switched off are stored in each user memory.



### LED setting

The flashing of the LED (flashes when unit is switched off) can be switched on or off using this function. Request user menu, then set **LED** using the right rotary control. Pressing the multifunction buttons “◀” or “▶” enables a choice between LED ON and LED OFF.



### GAL setting

The GAL is a car radio control circuit which automatically adjusts the car radio volume according to vehicle speed. This results in compensation of the driving noise produced at higher speeds. Request user menu, then set **GAL** using the right rotary control. Pressing the multifunction buttons “◀” or “▶” enables a choice between **GAL OFF** and **GAL 7**. With the GAL setting, the amount of volume control can be specified according to vehicle speed. The setting is stored automatically.



Explanation of terms:

- 00** - no volume control
- 01** - minimal volume adjustment
- 07** - maximal volume adjustment



## User Menu

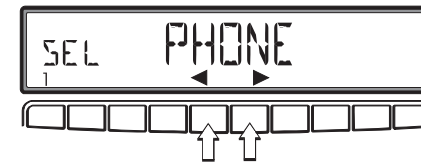
### Telephone mute characteristics (PHONE)

If a telephone system with handsfree unit is installed in the vehicle, the telephone conversation can be conducted via the car radio system. Thus, installation of the normally required additional loudspeaker is not necessary. However, the signal cables (AF - telephone input and earth - telephone input) must be connected to the car radio (see page 29).

In order to activate, request user menu then set **PHONE** using the right rotary control. Then, the multifunction buttons “◀” or “▶” can be used to select between

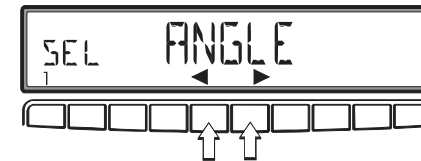
- PH OFF** - telephone mute function and
- PH ON** - telephone conversation via car radio.

are selected. The setting is effective immediately after actuating the multifunction button.



### Viewing angle setting (ANGLE)

Request user menu, then set **ANGLE** using the right rotary control. Using the multifunction buttons “◀” or “▶” enables a choice between four different viewing angle settings (**VIEW 1-4**) for the display. The setting is effective immediately after actuating the multifunction button.



## User Menu

---

### Country setting (COUNTRY)

Various countries can be set using this function, i.e. the search steps or the received waveband are changed according to the selected setting.

Request user menu, then set **COUNTRY** using the right rotary control. Choose one of the settings listed below using the multifunction buttons “◀” or “▶”.

The setting is stored automatically.

Possible settings are:

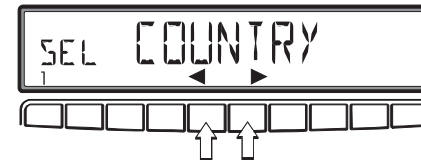
**USA** for the USA

**S-AMERIC** for South America

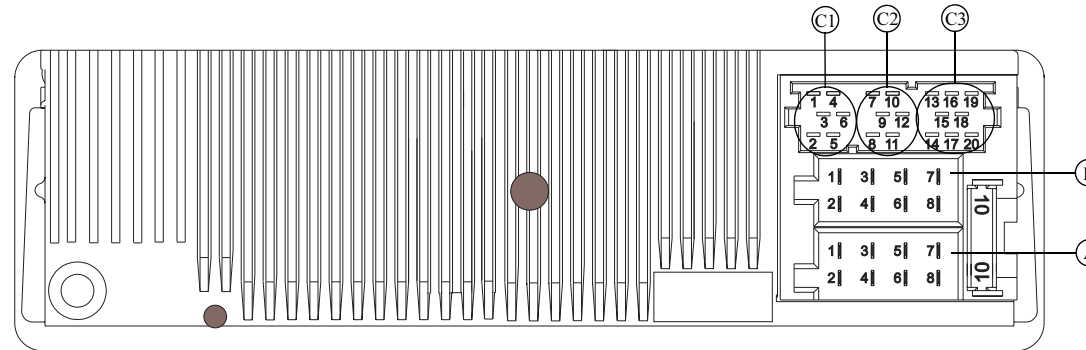
**AUSTRALI** for Australia

**ASIA** for Asia

The band limits and search steps are listed on page 29. For the ASIA setting the SW (short wave) wave band is additionally activated.



## Connection Instructions



### Socket A

- 1 Speed-dependent volume control
- 2 not assigned
- 3 Telephone mute / clearing function
- 4 Permanent positive (terminal 30)
- 5 Control output for automatic aerial / amplifier
- 6 not assigned
- 7 Switched positive (terminal 15)
- 8 Earth (terminal 31)

### Socket B

- 1 Loudspeaker rear right +
- 2 Loudspeaker rear right -
- 3 Loudspeaker front right +
- 4 Loudspeaker front right -
- 5 Loudspeaker front left +
- 6 Loudspeaker front left -
- 7 Loudspeaker rear left +
- 8 Loudspeaker rear left -

### Socket C1

- 1 LineOut rear left
- 2 LineOut rear right
- 3 AF earth
- 4 LineOut front links
- 5 LineOut front right
- 6 not assigned

### Socket C2

- 7-12 Special connection for Becker CD changer / Sony MD changer

### Socket C3

- 13 AF telephone input
- 14 Earth - telephone input
- 15-20 Special connection for Becker CD changer / Sony MD changer

## General Instructions

---

### RBDS system

This car radio is capable of receiving RBDS signals (RBDS = Radio - Broadcasting - Data - System) in the FM range. RBDS is a technique which enables the transmission of inaudible additional information in the FM broadcasting range. This means that the transmitter broadcasts information which can be evaluated by the car radio.

### PTY (Program Type)

Specific types of programme, such as e.g. sport, pop music, classical music etc., can be selected using the PTY function.

The PTY is broadcast by the RBDS transmitter, provided that the transmitter is equipped with this function. The selected transmitter programme type can be displayed or a search of a specific PTY transmitter can be performed.

Examples of programme types are:

<b>NEWS</b>	News service	<b>SOFT</b>	Soft
<b>INFORM</b>	Information programs	<b>NOSTALGA</b>	Nostalgia
<b>SPORTS</b>	sports reports	<b>JAZZ</b>	Jazz
<b>TALK</b>	Talk	<b>CLASSICL</b>	Classical
<b>ROCK</b>	Rock	<b>R&amp;B</b>	R&B
<b>CLS ROCK</b>	Classic rock	<b>SOFT R&amp;B</b>	Soft R&B
<b>ADLT HIT</b>	Adult hits	<b>LANGUAGE</b>	Language
<b>SOFT RCK</b>	Soft rock	<b>REL MUSC</b>	Religious music
<b>TOP 40</b>	Top 40	<b>REL TALK</b>	Religious talk
<b>COUNTRY</b>	Country	<b>PERSNLTY</b>	Personality
<b>OLDIES</b>	Oldies	<b>PUBLIC</b>	Public
<b>WEATHER</b>	Weather forecast	<b>PTY 24-28</b>	not specified
<b>NO PTY</b>	No programme type		

## Technical Data

<b>Wavebands</b>	: FM 87.9 MHz - 107.9 MHz ( <b>USA</b> ); FM 87.5 MHz - 107.9 MHz ( <b>S-AMERIC, AUSTRALI</b> ) FM 87.5 MHz - 108 MHz ( <b>ASIA</b> ) AM 530 kHz - 1700 kHz ( <b>USA, S-AMERIC</b> ); AM 531 kHz - 1602 kHz ( <b>AUSTRALI, ASIA</b> ) for <b>ASIA</b> additionally SW with 5900 kHz - 6250 kHz
<b>Search steps</b>	FM: 200 kHz ( <b>USA, S-AMERIC</b> ); 100 kHz ( <b>S-AMERIC</b> ); 50 kHz ( <b>ASIA</b> ) AM: 10 kHz ( <b>USA, S-AMERIC</b> ); 9 kHz ( <b>S-AMERIC, ASIA</b> ) SW: 5 kHz ( <b>ASIA</b> )
<b>Frequency range</b>	: 50 Hz - 14 kHz for cassette operation 20 Hz - 20 kHz for CD/MD operation 30 Hz - 15 kHz for FM 50 Hz - 2.5 kHz for AM
<b>Output power</b>	: 4 x 18 Watt
<b>Line cross-section</b>	: min. 0.75 mm <sup>2</sup>
<b>Loudspeaker impedance:</b>	min. 4 Ω
<b>Line out</b>	: 4 x analogue line out (V <sub>a</sub> max 3V <sub>eff</sub> at 10 kΩ)
<b>GAL</b>	: For speed dependent volume control, the adjustment is performed in 8 - 19 steps of 1.25 dB.
<b>Aerial</b>	: Impedance 50 Ω
<b>AF telephone input</b>	: Max. input voltage 8 V
<b>Telephone mute</b>	: Low active level < 2 Volt
<b>Supply voltage</b>	: 12 Volt
<b>CD/MD connection</b>	: The Becker CD changer Silverstone (2660 or 2630), or the Sony MD changers MDX 60 and MDX 61 can be connected.
<b>Playable CDs</b>	: Only CDs which conform to DIN EN 60908 may be used. The use of 8 cm CDs with adapter is not recommended.