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## **Safety Instructions**

**Operation of the unit is permitted only if the traffic conditions are suitable and you are absolutely sure that you, your passengers or other motorists are not endangered, obstructed or inconvenienced.**

**In all cases, valid road traffic regulations apply. The destination must only be entered when the vehicle is stationary.**

**The navigation system is only an aid. Errors may occur in individual data items/entries. At all times, the driver must decide whether or not to heed the information provided. We do not accept liability for erroneous data provided by the navigation system.**

**Due to continual changes in traffic routing or deviations in the data, it may occur that imprecise or erroneous information is given. The actual road signs and traffic regulations must therefore always be observed. Above all, the navigation system is not to be used as an aid to orientation when visibility is poor.**

**The unit may only be used for its intended purpose. The volume of the radio, navigation system and telephone should be adjusted so that external noise is still audible.**

**In the case of a malfunction (i.e. smoke or other noticeable odours) the unit is to be turned off immediately.**

**For safety reasons, the unit is to be opened only by a trained technician. Please refer to your dealer if repairs are necessary.**

## **Information regarding general road safety**

**This car radio device is intended and approved for installation and operation in passenger cars, commercial vehicles and buses (vehicle classes M, N and O) whose electric system has a rated voltage of 12V.**

**Installation and maintenance should only be carried out by specialists. Faulty installation or maintenance can result in the malfunctioning of the motor vehicle's electronic systems. The vehicle manufacturer's safety instructions must be observed.**

**The vehicle's electronics (e.g. speedometer signal) must only be worked on by an authorised service garage. We assume no liability for any impairment of the vehicle's electronics.**

**This device is only intended for installation in the area provided for this purpose by the vehicle manufacturer.**

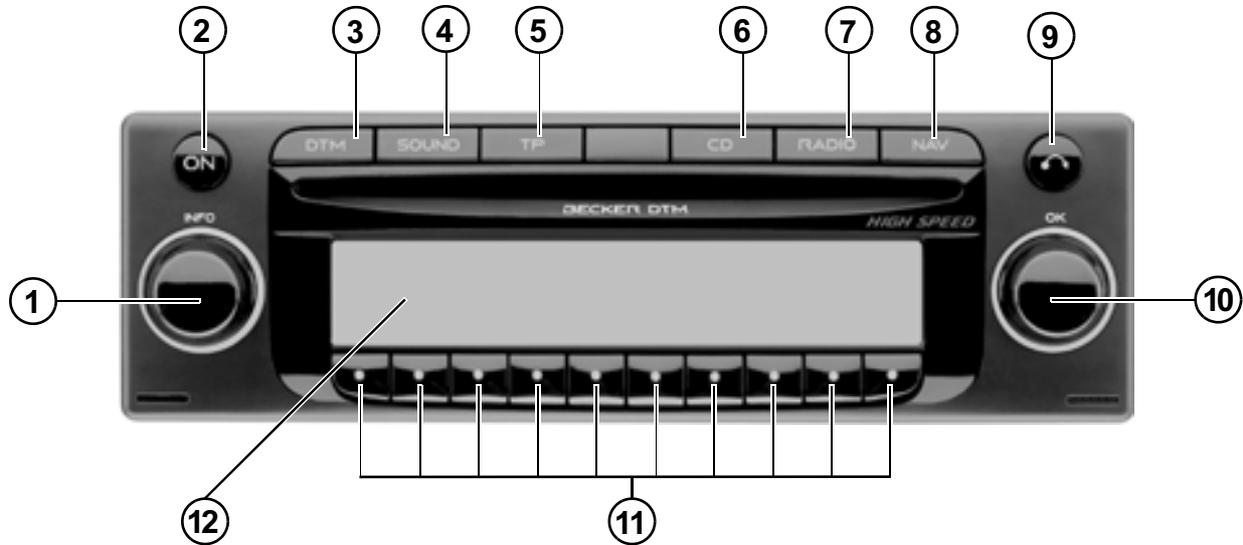
**The method of attachment used must ensure that the device will remain properly attached, should the vehicle be involved in a crash.**

**The power supply must be properly fused.**

**Using mobile phones without an external antenna in the proximity of the radio unit may cause interference.**

**Familiarise yourself with the device and how it works before embarking on your journey. Whilst on the move, only operate the device in appropriate traffic conditions. The volume of the device should be set at a level that enables external noises (e.g. police sirens) to be easily heard.**

## Arrangement of Controls



1 Left rotary control (INFO)

2 On / off switch (ON)

3 DTM button (DTM)

4 Tone button (SOUND)

5 Traffic programme button (TP)

6 CD selection button (CD)

7 Radio selection button (RAD)

8 Navigation selection button (NAV)

9 Eject button for CD (eject symbol)

10 Right Rotary Control (OK)

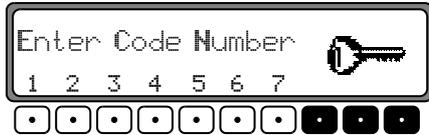
11 Multifunction buttons

12 Display

## Anti-theft Device

### Entering the Code Number

If the auto radio is disconnected from the electrical supply source, the anti-theft device prevents it from being reconnected. After turning on the unit via the **ON** button, the prompt Enter Code Number is displayed.



Using the multifunction buttons “1 - 7”, the five-digit code number must be entered.

**Exampel:** Code number 15372 (the code number can be found on the enclosed CODE CARD).

Enter code number using the multifunction buttons. Once the fifth digit has been entered and all other digits have been entered correctly, the unit switches on automatically.

**Note:** It is important to store the CODE CARD **in a safe place** outside of the vehicle. Thus, illegal use is not possible. The sticker provided should be attached to the inside of the vehicle windscreen/ window.

If an incorrect code number is entered, the prompt CODE will be displayed once again. If an incorrect code number is entered three times in a row, the unit will display WAIT, and the unit will be blocked for approximately 60 minutes.



Three further incorrect entries will block the unit for another 60 minutes.

**Attention:** The waiting time will elapse only when the unit is switched on.

## Switching On/ Off

Press the **ON** button.

Alternatively, switch on/ off: via the vehicle ignition. To switch the unit on via the ignition, the unit must have previously been turned off via the ignition. After turning off the vehicle ignition, the unit can be kept on by pressing the **ON** button within 3 seconds

**Note:** The unit can also be turned on without the vehicle ignition by pressing the **ON** button, however will shut off automatically after one hour.

## Adjusting Volume

Turn left rotary control **◀**. The volume is increased or decreased.

## Activate Tone Adjustment Menu

Press the **SOUND** button. The Tone Adjustment menu is activated. The following functions can be called up: **Bas** (Bass), **Trb** (Treble), **Fad** (Fader), **Bal** (Balance), **Flt** (Linear Setting), **Sub** (Subwoofer) and **Ldn** (Loudness).



Settings for bass, treble, fader, balance, and loudness for the FM, AM (MW, LW, SW) wavebands, road traffic announcements, navigation announcements, telephone operation, CD, MP3 and CDC/AUX operation are stored separately.

## Adjusting the Bass

Press the **SOUND** button. Then press the multifunction button **Bas**.



Adjust the bass to the desired level using the right rotary control **▶**.

## Adjusting the Treble

Press the **SOUND** button. Then press the multifunction button **Trb**.



Adjust the treble to the desired level using the right rotary control **▶**.

## General Operation

### Adjusting the Fader

Press the **SOUND** button. Then press the multifunction button **Fad**.



Adjust the fader setting to the desired level by pressing the right rotary control.

### Adjusting the Balance

Press the **SOUND** button. Then press the multifunction button **Bal**.



Adjust the balance to the desired level by pressing the right rotary control.

### Linear Setting

Press the **SOUND** button briefly.



Press the multifunction button **Fit** briefly - Tone flat will be displayed. By pressing the multifunction button **Fit** again, the tone adjustments for the current signal source (i.e. FM) will be reset to mid-level.

### Loudness On/ Off

Press the **SOUND** button then press the multifunction button **Ldn**.



Using the multifunction button **Ldn** either Loudness On (ON) or Loudness Off (OFF) can be selected.

In the MW, LW and SW wavebands, Loudness is switched off.

### Adjusting the Volume of the Subwoofer or Centre Speaker

Press the **SOUND** button. Then press the multifunction button **Sub**.



Using the right rotary control , adjust the subwoofer volume setting to the desired level.

# Navigation Operation

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## What is Navigation?

The term "navigation" (lat. navigare = to travel by sea) is generally understood to mean the location of a vehicle, the determination of the direction and distance from the desired destination and the required route. As navigation aids, stars, prominent landmarks, compass and satellites are used.

With OnlinePro, location is determined by the GPS receiver (GPS = Global Positioning System). The direction and distance from the destination is determined using a digital street map, a navigation computer and sensors. A speedometer and reverse signal are additionally used to calculate the route.

For safety reasons, route guidance follows predominantly in spoken form supported by a direction indicator on the display.



## Safety Instructions

- Road traffic regulations always take priority. The navigation system is only an aid. Errors may occur in individual data items/entries. At all times, the driver must decide whether or not to heed the information provided.  
We do not accept liability for erroneous data provided by the navigation system.
- Observation of traffic signs and local traffic regulations always takes priority
- Traffic guidance is restricted to passenger vehicles. Special driving recommendations and regulations for other vehicles (e.g. commercial vehicles) are not taken into account.
- The destination must only be entered when the vehicle is stationary.

## Navigation CDs

Two navigation CDs are supplied with the navigation unit. These CDs contain a digitised street map. One CD for Northern Europe (CD no. 1) and one CD for Southern Europe (CD no. 2) are supplied.

The complete trunk road network and all destination centres in the digitised area of Northern and Southern Europe are available on the CDs.

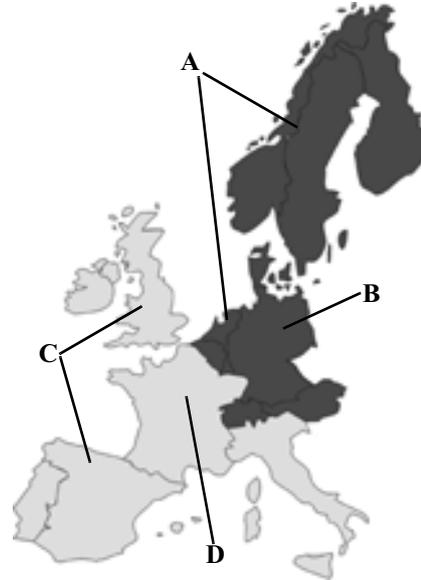
All digitised roads of the northern countries are also included on the Northern Europe CD. All digitised roads of the southern countries are also included on the Southern Europe CD.

In these detailed areas of the Northern or Southern Europe CD road map, motorways, regional roads and unclassified roads as well as country roads are stored. Larger cities and communities are comprehensively covered. For smaller towns and communities, the regional and unclassified roads or access roads and the town centres are included.

One-way streets, pedestrian zones, turning bans and other traffic regulations are taken into account as far as possible.

There may be discrepancies between the data on the navigation CD and the actual local situation, due to permanent changes to road systems and their traffic regulations.

## Navigation with two European CDs



- A** Area of Northern Europe CD with all digitised roads.
- B** For example, a town or an address in Germany (on the Northern Europe CD).
- C** Area of Southern Europe CD with all digitised roads.
- D** For example, a town or an address in France (on the Southern Europe CD).

## Navigation Operation

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For example, if you wish to navigate from a town on the Southern Europe CD (**D**) to a town on the Northern Europe CD (**B**), enter your destination address as usual. After entering the town, you will be prompted to insert navigation CD No. 1 by the display `PLEASE INSERT NAVIGATION CD #1`. After inserting the relevant CD, enter the road and, if required, the house number or the town centre.

The required map data is loaded and stored internally after route calculation has started.

**Note:** For Norway, Sweden, Finland and Denmark, non-verified data has been used to achieve a high depth of digitisation; i.e. with this data, the navigation system cannot refer to information such as motorway, trunk road, 30 zone, one-way street or other traffic regulations, as this is not recorded.

All roads can be used, but optimum route guidance cannot be guaranteed.

## General Instructions

- During route navigation, radio, CD or MP3 will still be heard.  
Distance to the next message and expected time of arrival are shown on the right side of the display.
- The unit can be switched to radio mode when route guidance is in operation by pressing the **RAD** button. The unit is switched to CD mode by pressing the **CD** button.  
The Navigation menu is automatically displayed when navigation announcements are given.
- When entering the address, only those letters, digits and symbols which are relevant for the address are displayed. The entries are automatically completed.  
An empty space (i.e. in Bad Abbach) must be entered with an underscore.  
Letters, numbers and symbols can be selected using the multifunction buttons **1** to **9**. The individual symbols can be selected by pressing the relevant multifunction buttons repeatedly.  
Selection can also be made using the right rotary control **●**, as described later in this guide.
- **NAV** exits the current menu and switches to the previous menu.

- The route is recalculated by the system if a deviation is made from the route.
- Briefly press the left rotary control  to hear the current navigation message.
- During a navigation message, the volume can be adjusted by pressing the left rotary control , and the tone by pushing the **SOUND** button for more than 2 seconds (see page 85).
- By briefly pressing the left rotary control , additional information can be requested during route guidance or the current position can be requested when route guidance is not active. See "Information during Route Guidance" on page 108.
- The current navigation announcement is interrupted by pressing the left rotary control .
- If the left rotary control  is held for more than 2 seconds during a navigation message, the navigation messages are turned off and route guidance takes place by way of the display only.  
Quickly pressing the left rotary control  turns the navigation messages back on.
- The scroll marks  and  indicate a selection list which can be scrolled through using the right rotary control . Each entry in the list shown in capital letters can be selected by pressing the right rotary control .

## Selecting Navigation

Press the **NAV** button.



The main navigation menu appears after this display.

**Note:** The navigation CD must be loaded when starting navigation mode for the first time. If calibration of the navigation system has not yet been completed, the system will prompt you to take a drive for calibration (see Installation Guide).

A navigation CD containing the data for the target country is required for navigation operations.

The navigation CD must be inserted to start calculation of a route. During calculation, the prompt  will blink in the display. Once calculation is completed, the prompt  will disappear, the navigation CD can be removed and an audio CD can be inserted.

When entering destinations, driving off should be delayed until the prompt  disappears.

# Navigation Operation

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## Main Navigation Menu



Selection can be made from

DESTINATION,  
DEST. MEMORY,  
P.O.I.,  
LAST DESTINATIONS,

by turning, and pressing the right rotary control ●.

- DESTINATION  
Accesses the entry menu for the destination.  
See "Entering Destination" on page 93.
- DESTINATION MEMORY  
Contains destinations that were previously stored.  
See "Destination Memory" on page 111.
- P.O.I.  
Menu for selecting regional and interregional destinations of special interest and local points of interest. POIs are for example petrol stations, airports or hospitals. See "P.O.I. (Points of Interest)" on page 111.

- LAST DESTINATIONS

A list of the last 50 destinations driven to is displayed. With the right rotary control ●, the desired destination can be selected. By pressing the left rotary control ●, information on the destination can be called up before confirming by pressing the right rotary control ●. Stopovers are not stored as last destinations.

## Entering Destination

In the Main Navigation menu, select DESTINATION with the right rotary control  and press to confirm.

### Selecting Country



If your destination is in a country other than the one currently shown, select COUNTRY with the right rotary control  and press to confirm.



Select the desired country with the right rotary control  and press to confirm.

**Note:** When selecting a distant destination, we recommend selecting a stopover (page 103) halfway.

## Entering Destination



The last location entered is displayed.

If you wish to select a destination within the area shown, you can immediately select ROAD or CENTRE.

If your destination lies in another area, select location with the right rotary control  and press to confirm.

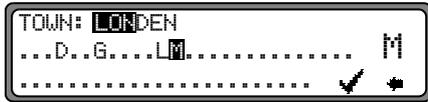


Select the letters one after the other by turning the right rotary control  and press to confirm. The enlarged selected letter appears at the right of the display.

With the multifunction button , the last letter confirmed is deleted.

The complete entry can be deleted by pressing the multifunction button  for more than 2 seconds.

## Navigation Operation



Letters that have already been entered are displayed inversely. For the purpose of support, the name of the location closest to the previous entry is displayed. The unit offers only the possible remaining letters for selection. If no other entries are available, the unit completes the place-name automatically.

To accept the entry, press and hold the right rotary control  for more than 2 seconds or select the small tick  and briefly press the right rotary control .

If the complete location name has been entered or completed automatically; i.e. the location entered exists only once in the country of destination, the unit will switch automatically to either the place selection list or the Road/ Centre entry.

If there are no streets or only the centre is available for a particular town, the unit will switch directly to the Route menu.

If an incomplete location entry was confirmed, the place selection list is displayed.



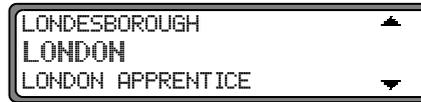
The name closest to the entry appears in capital letters in the place-distinguishing list.

The scroll marks indicate that other locations in alphabetical order can be selected.

A selection can be made by turning the right rotary control  and pressing to confirm. (See "General Instructions" on page 90.)

If a definite entry is given, the switches to the Road/ Centre Entry. If there are no streets or only the centre is available for a particular town, the unit will switch directly to the Route menu.

If the selection is unclear or ambiguous, the place-distinguishing list is shown.



Select the desired destination using the right rotary control  and press to confirm.

The program returns to the Road or Centre Entry.

If there are no streets or only the centre is available for a particular town, the unit will switch directly to the Route menu.

## Selecting destination via post code

The destination can also be selected via the town's post code.



Select the destination's POST CODE by turning the right rotary control  and press to confirm the selection.



Using the right rotary control , enter the post code for the destination and press for more than 2 seconds to confirm the entry. To confirm, the small tick  can also be selected and the right rotary control  briefly pressed.



The display then shows either the destination corresponding to the post code or, if the post code is shared among several towns, a list containing these towns.

Select the required location using the right rotary control  and press to confirm.

If more than 20 locations share the same post code, the display will show the location input menu instead of the above-

mentioned list. In that case, the location name is to be entered as described in "Entering Destination" on page 93.

The program returns to road or centre entry. If there are no streets in the selected town or only the centre can be selected, the unit will switch directly to the route menu.

## Entering Destination Road



Select ROAD with the right rotary control  and press to confirm.



Select the letters one after the other by turning the right rotary control  and press to confirm. The selected letter appears enlarged at the right of the display.

With the multifunction button , the last letter confirmed is deleted.

The complete entry can be deleted by pressing the multifunction button  for more than 2 seconds.

## Navigation Operation



Letters that have already been entered are displayed inverse-ly. For the purpose of support, the existing entry is displayed at the next road to be reached. The unit offers only the possible remaining letters for selection.

If no other entries are available, the unit completes the road-name.

To accept the entry, press and hold the right rotary control ● for more than 2 seconds or select the small tick ✓ and briefly press the right rotary control ●.

If the street name was entered completely or automatically completed, the program switches to either road-distinguishing list (same street name exists more than once in the location selected) or returns to the Route menu.

If an incomplete location entry was confirmed, the road selection list is displayed.



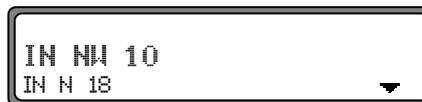
The road nearest to the entry appears in capital letters in the road selection list.

The scroll marks indicate that other streets in alphabetical order can be selected.

Select the road by turning the right rotary control ● and press to confirm.

If a definite entry is given, the program returns to the Route menu.

If entry is unclear (same street exists more than once in the same location), the street distinguishing list is shown.



Select the required place using the right rotary control ● and press to confirm.

Program switches to the Route menu.

## Entering the Destination Centre



With the right rotary control , select CENTRE and press to confirm.

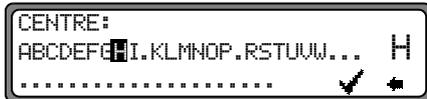
If the previously selected location has only one centre, the program immediately switches to the Route menu.

If the number of centres is less than 10, the centre list is displayed.



Select the centre by turning the right rotary control  and press to confirm.

If the number of centres is greater than 9, the program switches to centre entry.



Select the letters one after the other by turning the right rotary control  and press to confirm. The selected letter appears enlarged at the right of the display.

With the multifunction button , the last letter confirmed is deleted.

The complete entry can be deleted by pressing the multifunction button  for more than 2 seconds.



Letters that have already been entered are displayed inversely. For the purpose of support, the existing entry is displayed at the next centre to be reached. The unit offers only the possible remaining letters for selection. If no other entries are available, the unit completes the centre-name.

To accept the entry, press and hold the right rotary control  for more than 2 seconds or select the small tick  and briefly press the right rotary control .

Once the complete centre name is entered or automatically completed, the program switches to the Route menu.

If the selection is not clear, the program switches to the Centre list.



## Navigation Operation

The centre nearest to the entry appears in capital letters in the centre list.

The scroll marks indicate that other centres in alphabetical order can be selected.

Select the centre by turning the right rotary control  and press to confirm.

Program switches to the Route menu.

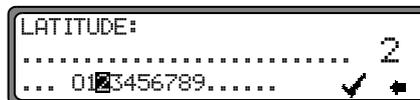
**Note:** By pressing the right rotary control  for more than 2 seconds without previously entering a letter, a list of the possible location centres will immediately appear.

### Destination input via coordinates

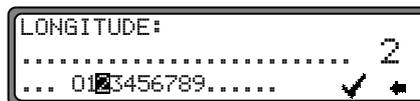
If the geographical coordinates (latitude and longitude) of a destination are known, these can be entered and route guidance to the destination started.



To enter the coordinates of the destination, select COORDINATES by turning the right-hand rotary control . Press to confirm the selection.



Enter the latitude of the destination using the right-hand rotary control . Entries must be made in degrees, minutes, seconds and a direction as the crow flies, e.g. 11°38'34" N. To confirm the entry, press and hold the right-hand rotary control  for more than 2 seconds. To confirm, the small tick  can also be selected and the right-hand rotary control  pressed briefly.



Enter the longitude of the destination using the right-hand rotary control  as described above.

To confirm the entry, press and hold the right-hand rotary control **⬤** for more than 2 seconds. To confirm, the small tick **✓** can also be selected and the right-hand rotary control **⬤** pressed briefly.

**Note:** If the coordinates entered are located beyond the boundaries of the digital map, a message will appear notifying you of this. The system cannot navigate to a position beyond the boundaries of the digital map.

The navigation system will now prompt you to enter a name for the coordinates entered.

Enter a name as described in "Entering a Destination in the Destination Memory" on page 102.

The program then switches to the Route menu.

Route guidance can now start.

## Route Menu



Selection can be made from

SAVE DESTINATION,  
START-FAST R., (START-SHORT R.  
or START-DYN. R.)  
HOUSE NO.,  
CROSSING  
ROUTE SETTINGS

by turning, and pressing the right rotary control **⬤**.

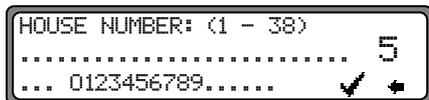
- **SAVE DESTINATION**  
Accesses the entry menu for the destination memory (page 102).
- **START-FAST R., START-SHORT R.  
or START-DYN. R.**  
Starts Navigation. Simultaneously, a prompt appears indicating the currently selected route option (-SHORT R. for shortest route, -FAST R. for fastest route and -DYN. R. for Dynamic Route)
- **HOUSE NO.**  
The house number in the specified destination road can be entered here.  
This function is only possible if the information is contained on the Navigation CD

## Navigation Operation

- **CROSSING**  
Here a cross-street can be entered as a destination.  
This function is only possible if the information is contained on the Navigation CD
- **ROUTE SETTINGS**  
Here criteria such as Fast Route, Short Route, Dynamic Route, Motorways, Ferries and Tolls can be selected.

### Entering House Number in the Destination Road

In the Route menu, select with the right rotary control ● and press to confirm. HOUSE NO. and press to confirm.



Enter the house number of the street destination with the right rotary control ● and confirm the entry by pressing the right rotary control for more than 2 seconds, or confirm by selecting the small tick ✓ and briefly pressing the right rotary control ●.

Due to system configurations, route guidance will only be given in the area of the entered house number.



Selecting START- starts the navigation.  
Selecting SAVE DESTINATION leads to the Destination

Memory menu.

The selection ROUTE SETTINGS allows you to choose the Route settings.

Select by turning the right rotary control ● and press to confirm selection.

### Selecting an Intersection on Destination Road

In the Route menu, select CROSSING with the right rotary control ● and press to confirm.



Select the intersection for the destination road by turning the right rotary control ● and press to confirm.



Selecting START- starts the navigation.

Selecting SAVE DESTINATION leads to the Destination Memory menu.

The selection ROUTE SETTINGS allows you to choose the Route settings.

Select by turning the right rotary control ● and press to confirm selection.

## Adjusting Route Settings

Select house number area by turning the right rotary control 

ROUTE SETTINGS and press to confirm.



- **FAST ROUTE**  
This selection calculates the shortest possible journey time.
- **SHORT ROUTE**  
This selection calculates the shortest possible distance to the destination.

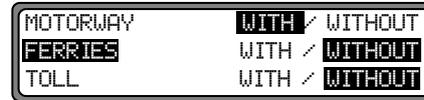
**Note:** For larger cities or urban areas, the setting "SHORT ROUTE" is recommended.

- **DYNAM. ROUTE**  
Dynamic route guidance is used to calculate the route, taking current traffic announcements into account.

**Note:** Can only be selected when TMC is active. See "Switching TMC On/ Off" on page 136.  
When Dynamic Route navigation is active, the route is calculated using the "FAST ROUTE" setting

Further information under "Dynamic Route Guidance" on page 124.

- **RESTRICTIONS**  
Provides options for avoiding bridges, ferries, tunnels or toll roads



A selection can be made by turning the right rotary control, and settings can be changed by pressing the right rotary control . Pressing the control for more than 2 seconds accepts all the settings and exits the menu.

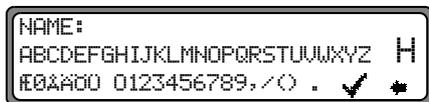
**Note:** Routes without motorways can only be calculated within a radius of approximately 200km.

## Navigation Operation

### Entering a Destination in the Destination Memory

It is not mandatory for navigation to store a destinations in the destination memory. It saves repeated manual entry, if the destination occurs again at a later date.

In the Route menu, select **SAVE DESTINATION** by turning the right rotary control  and press to confirm.



A name of your choice consisting of up to 14 characters can be entered for the specified destination, and is stored automatically in the destination memory by pressing the right rotary control  for more than 2 seconds. See "Destination Memory" on page 111.

The destination can also be stored by selecting the small tick  and briefly pressing the right rotary control .

Should you not wish to enter a name, press and hold the right rotary control  for more than 2 seconds and the destination will be entered in the Destination Memory without a name.

The last destination entered can be filed into any desired position in the Destination Memory by turning the right rotary control . The memory position is confirmed by briefly pressing the right rotary control .

A total of 50 destinations can be stored



To complete storage in the Destination Memory, navigation must be started, or a new destination entered by selecting **NEW DESTINATION**.

### Deleting a Destination from the Destination Memory

Select Destination Memory (see page 111).



Select the destination to be deleted with the right rotary control  and press the multifunction button .

### Destination Memory Full



Appears when the Destination Memory is full. Select either **DELETE** (switches to Destination Memory to delete a destination) or **BACK** (Cancels storage of destination).

## Route Guidance Calculation



The message "Calculating route" indicates that the distance is being calculated, which may take several seconds. After the first route guidance announcement, the prompt CD will continue to blink on the display until the route has been completely calculated. When a distant destination is entered, it is recommend to wait until CD has stopped blinking before driving away.

## Recalculating Route



If the current route is not followed due to road blocks, diversions, unintentionally driving in the wrong direction or failing to observe the recommendations, the system immediately calculates a new route. During this re-calculation, NEW ROUTE is displayed.

## Stopover

Stopover offers the possibility of entering a stopover destination during the active route guidance.

### Entering a Stopover



Press the multifunction button .



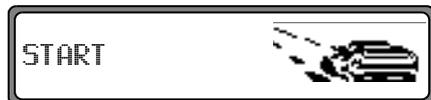
Using the right rotary control , make a selection and press to confirm.

- DESTINATION MEMORY (see page 111) Select a stopover from the destination memory.
- DESTINATION (see page 93) allows entry of a stopover with the precise specification of the address.

## Navigation Operation

- **P.O.I.**  
(see page 111) allows selection of special destinations (Points of Interest) as a stopover via LOCAL AREA, NEAR DESTINATION and TOWN/COUNTRY; such as petrol stations or airports.

### Start Route Guidance to a Stopover



To start route guidance to the stopover, press the right rotary control .

The route is calculated and route guidance begins.

**Note:** During route guidance to a stopover,  is displayed inversely.

### Deleting a Stopover



Press the multifunction button .



To delete the stopover, press the right rotary control  within 8 seconds.

### Reaching Stopover



After the message YOU HAVE REACHED YOUR STOPOVER, route guidance to the main destination is started automatically.

## Traffic Jam (Block) Function

This function allows you to block the approaching route sections as of the next junction and calculate a detour route when a traffic jam or road block is directly ahead.

### Entering Length of Traffic Jam



Press the multifunction button .



Using the right rotary control , set the length of the traffic jam and press to confirm.



In the display,  appears inversely and the route is recalculated.

### Delete Block



Press the multifunction button .



To delete a block, press the right rotary control  within 8 seconds.

### Cancelling Route Guidance

Press the **NAV** button.



The route guidance is cancelled when the right rotary control  is pressed within 8 seconds.

Otherwise route guidance will continue.

# Navigation Operation

## Notes on Route Guidance

After entering the destination (address), the system calculates the route and announces:

“Ready to drive off”.

The driving recommendations are given via voice messages and displays on the screen.

By pressing the left rotary control ● the current driving recommendation can be heard again.

If the route to be travelled is not clear, e.g. at an intersection where a change in direction is not specified, the direction of travel can be displayed by pressing the right rotary control ●.



Please follow the direction indicated by the arrow.

The display appears for 8 seconds after pressing the right rotary control ●.

### **Warning** **Accident hazard**

Road traffic regulations always take priority when a vehicle is being driven in traffic. The navigation system is only an aid. Errors may occur in individual data items/entries. At all times, the driver must decide whether or not to heed the information provided.

We do not accept liability for erroneous data provided by the navigation system.

For clarification, there follows a selection of examples of possible driving recommendations:

- "Please perform a U-turn if possible".



You are driving in the wrong direction and should turn back at the earliest opportunity.

- "Please turn right after 300 metres".



The arrow indicator  points to the next street into which you should turn.

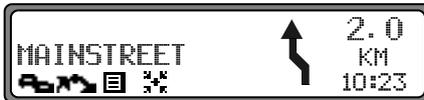
The progress bar on the right illustrates the distance and the black part decreases as you approach the intersection.

- "Please follow the road".



This display tells you that you should continue to follow the road you are on.

- "Prepare to turn left" or "Please merge into left lane".



This recommendation prepares you for the next turning to be taken.

"Please merge into left lane" does not mean however that you should immediately get into the left turn lane.

**Note:** At intersections and roundabouts, only the ends of the roads that are being passed are displayed.

- "Please leave the roundabout at the third exit on the right".



This display shows you which exit (marked with the arrow) you must take at the roundabout.

- "Now drive straight ahead".



At this point, you must drive straight ahead.

- "Please follow the direction arrows".



This display tells you that you are currently on a non-digitised street (i.e. parking lot, garage, parking deck) which is not contained in the digitised road map. The arrow indicates the direction of the destination as the crow flies.

## Navigation Operation

- "Keep right after 2 kilometres".



Keep right means that the street will split and that you should follow the corresponding direction of travel.

- "You have reached your destination".



The destination specified has been reached and route guidance is terminated.

## Information during Route Guidance



Press the left rotary control .

The destination, the distance and the estimated time of arrival are displayed.



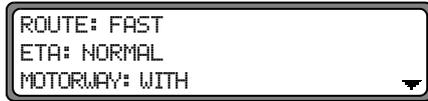
If a stopover has been specified, the stopover, the distance and the estimated time of arrival are displayed. The main destination can be displayed via the multifunction button .

To return to route guidance, press the left rotary control  again or wait for 8 seconds.

## Displaying Route Settings



During route guidance, press the left rotary control . Press the multifunction button .



The route settings are displayed.

After 8 seconds, the system returns to the route guidance display.

## Requesting Current Time



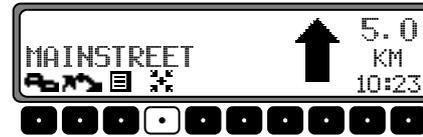
During route guidance, press the left rotary control . Press multifunction button .



The current time is displayed. After 8 seconds, the system returns to the route guidance display.

## Requesting Current Position

During route guidance, the current position can be requested.



Press the multifunction button .



The current position, with street name (if available), latitude and longitude, elevation above sea level (in 50 m increments) and the number of satellites received will be displayed.

Pressing the right rotary control  will return to the route guidance display.

## Navigation Operation

If Route Guidance is not activated, call up the Position menu by pressing the left rotary control .



The current position, with street name (if available), latitude and longitude, elevation above sea level (in 50 m increments) and the number of satellites received will be displayed.

Pressing the right rotary control  or the **NAV** button will exit the Position menu.

### Calling up Street List

During Route guidance, the list of streets for the planned route can be called up.



Press the multifunction button .



The current road and the road names up to the destination are displayed. The route list can be scrolled through by turning the right rotary control .

Pressing the right rotary control  returns you to the route guidance display.

**Note:** After entering the destination, it will take some time until the route list is compiled.

If the vehicle is currently in an "off road" area when the destination is entered, no route list can be compiled until a stored road is reached.

## Destination Memory

Using the right rotary control , select DESTINATION MEMORY in the main Navigation menu and press to confirm.



The destination memory contains personally stored destinations.

Once a destination has been stored, it does not have to be manually re-entered.



Select the desired destination using the right rotary control  and press to confirm.

Then start route guidance.

## P.O.I. (Points of Interest)

Menu for the selection of POIs from a list. POIs are for example petrol stations, airports or hospitals.



Using the right rotary control , select P.O.I. in the Main Navigation menu and press to confirm.



Using the right rotary control , make a selection and press to confirm.

- P.O.I. LOCAL AREA / NEAR DESTINATION  
POIs in the current local vicinity of the vehicle or in the vicinity of the destination can be selected.



Select a category using the right rotary control  and press to confirm.

## Navigation Operation



A list of destinations is shown based on distance. The kilometres shown are the distance (straight-line) between the POI and the current location.

The arrows behind the distance indicate the direction to the particular POI (i.e. ➔ POI is in the direction of travel, or ➔ POI is in the opposite direction of travel).

Select the desired destination with the right rotary control ●.

By pressing the left rotary control ● information on the selected destination is listed (i.e. a hospital).



Confirm selection with the right rotary control ●. The program will then jump to the Route menu.

- P.O.I. TOWN/COUNTRY  
POIs can be selected in those countries contained on Navigation CD.



With the right rotary control ●, select from GERMANY (see page 93), TOWN or NATIONWIDE and press to confirm.

Selecting TOWN

POIs can be selected once the town is entered.



Using the right rotary control ●, enter the name of the town and press to confirm.

Then, select town from the town selection list using the right rotary control ● and confirm once again by pressing.



The POIs for the selected town are displayed. Select a category using the right rotary control  and press to confirm. A list of POIs is displayed or, if there are more than 9 POIs in the list, you will be prompted to enter text



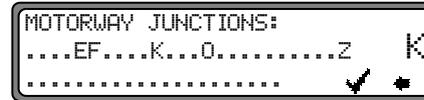
Enter the POI and confirm. Confirm the POI in the appearing list by pressing the right rotary control . The program will then jump to the Route menu.

**Note:** By pressing the right rotary control  for more than 2 seconds without selecting a letter, a list of all possible POIs will appear.

Selecting NATIONWIDE



Select a category using the right rotary control  and press to confirm. A list of POIs is displayed or, if there are more than 9 POIs in the list, you will be prompted to enter text



Enter the POI and confirm. Confirm the POI in the displayed list by pressing the right rotary control . The program will then jump to the Route menu.

**Note:** By pressing the right rotary control  for more than 2 seconds without selecting a letter, a list of all possible POIs will appear.

## Navigation Operation

### Points of interest (P.O.I.) CD

These instructions contain the general description of the points of interest (or P.O.I.) CD accompanying the unit.

There are two methods of selecting a point of interest from a points of interest (P.O.I.) CD:

- During active navigation, a point of interest in the vicinity of the current position or near to the entered destination can be selected.
- If navigation is not active, points of interest in the vicinity of the current position can be selected.

Insert the desired points of interest CD into the CD slot. After a short time, the following display appears:



Press the right rotary control .

The valid categories for the current points of interest CD are displayed.



The categories shown here in the illustrations are examples. The actual display is dependent upon the CD used.

Select the desired category with the right rotary control . Then, press the right rotary control to confirm the category.

**Note:** If the set user language is identical with one of the languages available on the CD, the categories are displayed in this language. If there is no correspondence, the categories are displayed in all available languages. This can be recognised by the country abbreviations in front of the category.

If the points of interest CD is inserted during active navigation, the system requests information on the location of the point of interest (near to destination or in vicinity of current position).

If navigation is not active, this selection is skipped.



With the right rotary control, select between LOCAL AREA and NEAR DESTINATION.



After a short time, the available points of interest for the selected categories are displayed.

The arrows following the distance information indicate the direction of the relevant point of interest (e.g.  point of inter-

est lies in the direction of travel, ↗ point of interest lies in the opposite direction to that of travel).

Then, by turning the right rotary control ●, select the desired point of interest. The point of interest is accepted by pressing the rotary control ●.

Before confirming the point of interest, press **NAV** to return to selection of categories in order to select a different point of interest, if required.

Press the left rotary control ● to display information on the point of interest. This information may include prices, location description, general appraisal etc., for the point of interest.



HARHEIMER HOF  
60437 FRANKFURT  
ALT HARHEIM 11

Pressing **NAV** or pressing the left rotary control ●, returns to the list of points of interest.

Following selection of the point of interest, you will be prompted to insert the navigation CD for route calculation.

If the point of interest was selected during active navigation, it will be treated as a stopover.

After a short time, route calculation to the selected point of interest is performed.

**Note:** If a stopover has already been entered, this will be overwritten by the new point of interest.

In order to cancel navigation to the selected point of interest, you must either cancel navigation or cancel navigation to the stopover, as described in the complete operating guide.

In order to cancel entry of the point of interest from the point of interest (P.O.I.) CD, you must eject the point of interest (P.O.I.) CD by pressing ●.

### Terms of licence

You are granted a non-exclusive licence to use the database for your personal purposes, or, where applicable, for internal purposes in your business operations. The present licence does not authorise the granting of sublicenses. Use of the data is only permitted in this specific Becker system. It is forbidden to extract or make further use of significant parts of the database content, or to duplicate, copy, modify, adapt, translate, analyse, decompile or reverse engineer any part thereof. The maximum possible care has been taken in compiling this CD. Nevertheless, some data may be incorrect or outdated. Under no circumstances do we accept any liability.

# Navigation Operation

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## System Settings

Press the **NAV** button in the Main Navigation menu.  
The System Settings menu is called up.



Selection can be made from

TIME,  
SAVE POSITION,  
LANGUAGE\*,  
ANIMATION,  
MEASURING UNIT,  
ANNOUNCEMENT ETA,  
ETA CALCULATION,  
SPEEDLIMITS

by turning, and pressing the right rotary control ●.

- **TIME**  
The system's internal clock can be set to the local time.
- **SAVE POSITION**  
The current position can be saved and stored in the Destination Memory.
- **LANGUAGE\***  
Language setting for the navigation system.

- **ANIMATION**  
The display animation can be turned on/ off
- **MEASURING UNIT**  
The unit of measurement can be changed from kilometres/ metres to miles/ yards.
- **ANNOUNCEMENT ETA**  
Voice announcements for the expected time of arrival (ETA) can be turned on/ off.
- **ETA CALCULATION**  
Calculation of ETA can be influenced.
- **SPEEDLIMITS**  
Display of speed limits can be switched on/off.



## Navigation Operation

### Calling up Position

Call up Destination Memory (see page 111) and select destination with the right rotary control ●.

If the position is outside a digitised area, the driver is guided along the digitised route nearest to the destination. The message "The destination is nearby" will follow. To reach the destination, follow the direction arrows.

### Setting Language



Select and confirm LANGUAGE\* in the System Settings menu.



Select the language using the right rotary control ●. The language selection is accepted by pressing the control and the language is installed.

You can choose either a male or a female voice for certain languages



Select the voice using the right rotary control ●. The voice is accepted and installed by pressing the right rotary control.



After the installation, you will be prompted to confirm.



Confirm by pressing the right rotary control ●.

## Animation



Select and confirm ANIMATION in the System Setting menu.



By pressing the right rotary control  selection can be made between Animation ON or OFF.

Setting is confirmed and accepted by pressing and holding the right rotary control .

The system returns to the System Settings menu.

## Switching Announcement of Arrival Time On/ Off:



Select and confirm ANNOUNCEMENT ETA in the System Settings menu.

ETA stands for Estimated Time of Arrival.



By pressing the right rotary control , selection can be made between Announcement ETA ON or OFF.

Setting is confirmed and accepted by pressing and holding the right rotary control .

The system returns to the System Settings menu.

# Navigation Operation

## Influencing the Calculation of ETA

Calculation of the ETA can be influenced.



Select and confirm **ETA CALCULATION** in the System Settings menu.

**ETA** stands for **Estimated Time of Arrival**.



Selection can be made from

SPORTY,  
NORMAL,  
LOW-RISK

by turning, and pressing the right rotary control .

- **SPORTY**  
With this setting the unit adjusts ETA for faster drivers. An earlier ETA is calculated.

- **NORMAL**  
This setting is the default setting. It offers sufficiently accurate calculation of ETA for most drivers.
- **LOW-RISK**  
With this setting the unit adjusts for drivers who may take longer for the planned journey. This setting could be used for example in dense traffic areas.

## Selecting Measuring Units



Select and confirm **MEASURING UNIT** in the System Settings menu.



Select the measuring unit using the right rotary control . The measuring unit is accepted by pressing the control. The system returns to the System Settings menu.

**Note:** **METRIC** stands for calculation in metres.  
**IMPERIAL** stands for calculation in yards.

## Switching the speed limits display on/off

If the speed limits display is ON, the system will inform you of the maximum permissible speed limit for the route along which you are travelling during route guidance, insofar as this information is available.



Set and confirm SPEEDLIMITS in the System Settings menu.



If, when the speed limit display is ON, you travel along a route with a speed limit and this speed limit is stored on the navigation CD, the corresponding symbol will appear on the right-hand side of the display indicating the speed limit.



The distance to the next point at which for example a turn should be made is displayed below the navigation arrow, which appears in reduced format.

On routes with variable speed limits (dependent on weather conditions, etc.), a symbol with the text **DYN** draws the driver's attention to the fact that the speed limit is variable.

## Dear Customer

You will have no problem finding any destination in Europe with your navigation package for the BECKER navigation system. The Tele Atlas data featured in the system enables the maximum permissible speed for the motorway on which you are travelling to be displayed on-screen.

In order to provide this unique service, Tele Atlas has recorded more than 26,000 speed limits covering almost 100,000 kilometres of motorway across Europe. Of these 26,000 speed limits, 14,000 are constant and 12,000 are variable. Variable speed limits may for example be determined by the weather or time of day and appear on the system display underlined (e.g.: "80") or are controlled by traffic regulations, in which case they appear in the system as "dyn".

As temporary speed limits (e.g. due to road works) are usually short-lived, these have not been included on the CD.

## Navigation Operation

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Warning

Accident hazard

Road traffic regulations always take priority when a vehicle is being driven in traffic. Road signs en-route should always be heeded. In some cases, the speed limit indicated by the navigation system may be incorrect. At all times, the driver must decide whether or not to heed the speed limit indicated. We do not accept liability for erroneous data provided by the navigation system.

We will of course continue to monitor and check roads in order to be able to offer an improved service. Should you notice something we have missed, please contact us using the feedback form on our website.

<http://www.teleatlas.com>

Link: (home > customer care/support > navigation CDs > Your feedback)

## DTM Functions

With the DTM function, all traffic announcements and those traffic announcements that pertain to the calculated route are displayed. A route calculator will search for and direct you to fuel stations along the calculated route.

### Calling up DTM Functions

Press the **DTM** button.



The DTM Menu is displayed.

The received traffic announcements are displayed.

### Calling up Fuel Stations Along the Route

Press the **DTM** button.



Press the multifunction button .



The fuel stations are listed based on distance. The kilometres shown are the distance (straight-line) between the POI and the current location.

The arrow shown behind the distance indicates the direction of the fuel station (i.e. + fuel station is in the direction of travel, - fuel station is in the opposite direction of travel). Select the desired fuel station with the right rotary control  and press to confirm selection .



To start navigation to the fuel station, press the right rotary control .

The route is calculated and route guidance begins.

**Note:** For calculating the route or selection of the fuel station, the unit will request the Navigation CD (if Navigation CD is not already inserted).

# DTM - Dynamic Traffic Management

## Call up Duration of Journey and Kilometres Driven

To call up the DTM menu, press the **DTM** button.



Press the multifunction button .



The duration of the journey, the kilometres driven and the average speed are displayed. Pressing the right rotary control  or the **NAV** button will return to the Navigation display.

By pressing the right rotary control  for more than 2 seconds, the displayed values are reset and the calculation starts again from the beginning.

The information for journey duration, kilometres travelled and the average speed can also be requested as previously described, as long as the destination “flag” is still waving after the destination has been reached.

## Dynamic Route Guidance

**Note:** Dynamic route guidance is not possible in all countries.

When Dynamic Route Guidance is active, the navigation system may request the Navigation CD for possible route calculation (if the Navigation CD is not inserted).



Austria: The location and event code was made available by ASFINAG and BMVIT.

## What is Dynamic Route Guidance?

With Dynamic Route Guidance, the route is calculated taking current traffic announcements into account..

The traffic announcements are transmitted by a TMC radio station in addition to the radio programme and are received and analysed by the navigation system. The reception of traffic announcements is free of charge.

**Note:** As the traffic announcements are transmitted by radio stations, we cannot assume responsibility for the completeness or accuracy of the announcements.

## Dynamic Route Guidance

In the Route menu, Dynamic Route Guidance can be started by selecting **START DYN.R.**

If dynamic route guidance has been activated, a continuous check is made for the presence of relevant announcements for the selected route. The route is then calculated using the "fast route" option, while taking into account current traffic announcements. If it is determined during these continuous checks that a traffic announcement is of relevance for the route guidance, the unit will automatically re-calculate a new route to the destination.

**NEW ROUTE** is shown on the display. In addition, there is a voice announcement "**The route is being recalculated based on current traffic announcements**".

In the DTM Display, **i†** is shown inversely.

**Note:** If no TMC station can be found, the display will show **CURRENTLY TMC RECEPTION IS NOT POSSIBLE**. The unit will switch back to the route guidance display after a short time.

If no TMC stations can be found within 10 minutes, **CURRENTLY TMC RECEPTION IS NOT POSSIBLE** will appear on the display again and a short signal tone will sound.

## Display Traffic Information

Current traffic announcements can be displayed in text form. To call up the DTM Menu, press the **DTM** button.



By pressing the multifunction button **▲**, a list of all currently available traffic information will be displayed.

By pressing the multifunction button **i†**, a list of all current traffic information relevant for the calculated route is displayed.

**Note:** If no current traffic information is available, **NO TRAFFIC MESSAGES RECEIVED** will be displayed.

In the list of current traffic information, more detailed information on the individual announcements can be requested.

# DTM - Dynamic Traffic Management

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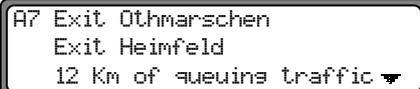
```
A7 Schnelsen Nord Quirborn →
A7 Exit Othmarschen
A24 Xins Eidelstedt ↓
```

The scroll marks at the right edge of the display indicate that additional traffic information is available.

A selection can be made by turning the right rotary control  and pressing to confirm.

After confirming the traffic information desired, the information is shown in its entirety. A typical traffic announcement is shown as follows.

- a motorway or road number
- approximate direction information
- detailed location and direction information
- the incident
- the cause, if known



```
A7 Exit Othmarschen
Exit Heimfeld
12 Km of queuing traffic ↓
```

Scroll marks on the right side of the display indicate that more than 3 lines are required for the traffic information.

Pressing the **NAV** button returns to the list of the current traffic information.

## Switching on Radio Mode

Press the **RAD** button.

The last selected waveband is set.

## Switching on Radio Menu Mode

Press the **RAD** button in radio mode.



The radio menu mode is switched on and displayed. The unit switches back to radio mode if no button is pressed within the next 8 seconds.

## Selecting FM Waveband

In the Radio Menu Mode, press the multifunction button

**Fm**.



The last selected radio station and level are displayed.

By pressing repeatedly, selection can be made between the levels DAS Seek Qual., DAS Seek Name, Stations RDS and Stations Fix.

- DAS Seek Qual. (see also page 152)
- DAS Seek Name (see also page 152)
- Stations RDS (see also page 152)
- Stations Fix (see also page 152)

## Selecting AM Waveband

In the Radio Menu Mode, press the multifunction button

**Am**.



The last selected waveband and radio station are set.

To select the MW (Med. Wave), LW (Long Wave) and SW (Short Wave) wavebands, repeatedly press the multifunction button **Am** until the desired waveband is set.

## Settings for Station Selection

The desired station can be selected via dynamic autostore (FM), autostore (MW, LW), station search, scan search, manual tuning, and station buttons.

## Radio Mode

### Dynamic Autostore (FM-DAS)

In the Radio Menu Mode, press the multifunction button **Fm** until DAS Seek Qual. or DAS Seek Name is displayed.



In the FM DAS mode, the receivable stations are displayed via the multifunction buttons depending on the settings.



The desired station is set by pressing the button directly below the abbreviated station designation. If the selected station broadcasts several programmes/regional programmes, a sub-menu is automatically displayed to select the desired programme.



If a programme has previously been selected that belongs to the particular station programming chain, the last stored programme entry will be automatically selected.

The multifunction button **->** indicates that, by pushing the button, other stations can be displayed and selected. If stations names are being misused to send advertisements or messages, this station is indicated with L-1...L-Z (L = Local). This prevents constant switching in the lower display line. When a station is selected, it is identified by a star (e.g. L\*1).

The first time the unit is operated, or when the electrical supply has been interrupted, it may take the radio some time to evaluate the station signals. The display will appear incrementally as the evaluation progresses.

### Station Search FM - DAS

Turn the right rotary control **⬤** to the left or right. The radio displays the receivable and identified radio stations in descending/ascending order

### Station Search MW, LW, SW

In the desired waveband (MW, LW or SW) turn the right rotary control **⬤** to the left or right. The radio searches for reception frequencies in descending/ascending order of frequency.

## Scan Search

In the desired waveband (FM, MW, LW or SW), press the right rotary control **SC**, **SC** will be displayed.



An automatic station search is started. The first run is performed on an insensitive plane, all further runs on a sensitive plane. Receivable stations can be heard for 8 seconds. Press the right rotary control **SC** to retain the received station.

**Note:** With FM DAS, Scan Search is conducted in alphabetical order.

## Programme Filtering for FM DAS

You have the option of filtering various stations from the FM DAS station list.

In the Radio Menu Mode, press the multifunction button **Fil**.



The individual programmes can be selected using the right rotary control **SC**. By pressing the right rotary control **SC**, selection can be made between **Play** (Programme unfiltered) and

**Skip** (Programme filtered out).

To switch the filter function on or off, repeated press the multifunction button **Fil** to switch the filter function on (**Fil on**) or off (**No Fil**).

## Programme Type Selection (PTY)

In the Radio Menu Mode, press the multifunction button **Pty**.



Then, use the multifunction button **Pty** to select the desired **PTY** (see also page 153).

**Note:** Only those **PTY**s that are currently available can be selected.

If a **PTY** is selected in **FM DAS** mode, only those stations with this particular **PTY** can be selected.

By selecting **NO PTY** in **FM-DAS** mode, all stations will once again be displayed.

## Radio Mode

### Swirching PTY Display On/ Off

Select radio menu mode.



With the multifunction button **Dis**, select either PTY (PTY Display On) or Frequency (PTY Display Off).

### Calling up/ Storing FM Stations

In the Radio Menu Mode, use the multifunction button **Fm** to select the level Stations RDS or Stations Fix.

- Stations RDS (see also page 152)
- Stations Fix (see also page 152)

**Storing:** 12 frequencies or programmes can be stored per waveband.

To store the desired station or programme, press the multifunction buttons **1 - 6** or **7 - 12** until a signal tone sounds.



To reach memory locations 7 – 12, press the multifunction button **->**.

**Calling up a stored station:** Press the multifunction button **1 - 6** or **7 - 12**. The stored transmitter is called up.

### Calling up/ Storing MW, LW, SW Stations

**Storing:** Up to 12 stations can be stored under the station buttons. Search for the desired station and press the desired multifunction button until a signal tone sounds.

To reach memory locations 7 – 12, press the multifunction button **->**.



**Calling up:** Repeatedly press the multifunction button **1 - 6** or **7 - 12**. The stored transmitter is called up.

## Autostore MW, LW

Press the **RAD** button.



Press the multifunction button **As** until Autostore on is displayed.

Press the multifunction button **As** until Seek Autostore is displayed.

The 6 best received stations will be stored under the station buttons in the order of their reception quality.

To exit the Autostore memory level, switch off the Autostore memory using the multifunction button **As** (Autostore Off). The radio switches back to the station button plane.

## Manual Tuning FM

In Radio Menu Mode use multifunction button **FM** to select the Stations Fix level.



Press the multifunction button **Man** twice. Now turn the right rotary control **●**.

Tuning will take place in increments of 100 kHz.

The currently active manual tuning is indicated by **MAN** in the display. If the right rotary control **●** is not turned after a short time, **MAN** will disappear from the display and the manual tuning is switched off.

## Manual Tuning MW, LW, KW

Press the **RAD** button.



Press the multifunction button **Man** twice.

Then turn the right rotary control **●**.

Tuning will take place in increments of 9kHz (MW), 3kHz (LW) or 5kHz (SW).

The currently active manual tuning is indicated by **MAN** in the display. If the right rotary control **●** is not turned after a short time, **MAN** will disappear from the display and the manual tuning is switched off.

## Radio Mode

### Regionalisation

The RDS diversity function is independent of region. In this mode it can occur that, through the RDS diversity function, the radio will switch between various regional programmes with differing programme formats. If this occurs, the special regional programming must be selected directly.

If several regional programmes are transmitted by one station, this can only be seen when the station is selected. Stations with additional regional stations are indicated with a star (e.g. 4\*).



Upon selection of one of these stations (e.g. 4\*) all receivable regional sub-programmes for this station will be displayed. Then, select the desired regional sub-programme (e.g. **Ka**).



If the reception quality of a regional sub-programme drifts despite the RDS Diversity function, it may mean that regional sub-programming is only transmitted on a few frequencies. If the unit remains tuned to frequencies with better reception quality, there will be less drift.

### Switching Regionalisation On/ Off

Select radio menu mode.



Using the multifunction button **Res**, switch Regionalisation on (On) or off (off).

### Switching Frequency Display On/ Off

Select radio menu mode.



Using the multifunction button **Dis**, select either Frequency (Frequency display on) or PTY (Frequency display off).

## Switching Radio Text On/ Off

Select FM radio menu mode. With the multifunction button **Txt** switch on Radio Text.



The car radio filters data transmitted by the radio station and displays it in the form of radio text.

Radio text cannot be displayed unless the selected transmitter also transmits radio text.

During poor reception situations or interference, the display of the radio text may be garbled or not possible at all.

To exit the Radio Text level, press the **RAD** button.



### **Danger** **Accident hazard**

Since information transmitted via radio text varies constantly, we recommend displaying the radio text only when the vehicle is stationary to avoid unnecessary distraction for the driver. This is a necessary precaution for accident prevention.

## Traffic Programme (TP)

If an RDS Diversity station broadcasts TP announcements, it is possible to interrupt CD, MP3, CDC/AUX, MW, LW, KW play or the mute mode and switch the TP announcements through. Moreover, you can listen to one FM station while having TP announcements switched through that are transmitted by another FM station.

There are two ways to select a TP transmitter:

- **automatic tracking**
- **direct programming**

With the **automatic tracking function**, the FM station currently being listened to is always used as the TP station. If the selected FM station has poor reception quality or cannot function as a TP transmitter, the unit applies specified criteria to search for a new TP transmitter.

With **direct programming**, a TP station other than the one being listened to can be programmed. For example, one FM station can be received while TP announcements transmitted by another FM station are switched through.

If the programmed TP transmitter reception is poor, the unit switches to automatic tracking until the programmed TP transmitter is receivable.

If the unit detects a TP station, this is indicated on the display by TP.

An inverse **TP** appears on the display to indicate that the traffic programme is active.

## Radio Mode

### TP - Activating/ Exiting the TP Menu

**Activating:** Press the **TP** button (traffic announcements cannot be transmitted).



Press the multifunction button **TP**.

**Exiting:** Press the **TP** button, or the TP menu will automatically disappear after 8 seconds if no further operations are performed.

### Switching TP On/ Off

In all operations and wavebands, TP can be switched on or off by pressing and holding the button **TP** for more than 2 seconds.

TP can also be switched on/off in the TP - menu.

**Switching on:** To switch on TP in the TP Menu, repeatedly press the multifunction button **TP** until TP on appears.



**Switching off:** To switch off TP in the TP Menu, repeatedly press the multifunction button **TP** until TP off appears.



TP is switched off after returning to normal display.

### Selecting Automatic Tracking

In all operations and wavebands, automatic tracking can be switched on by pressing and holding the **TP** button for more than 2 seconds.

To switch on automatic tracking in the TP Menu, repeatedly press the multifunction button **TP** until TP on appears.



**Attention:** If a TP transmitter has already been programmed directly, it will once again be selected as the TP transmitter.

## Selecting / Deleting Direct Programming

Activate the TP menu.

**Selecting:** Repeatedly press the multifunction button **Sta**.



Using the right rotary control , select the desired TP station and press to confirm. After a short delay and without actuation, the selected station is accepted.

**Deleting:** Repeatedly press the multifunction button **Sta**.



Select **Autoselect** with the right rotary control  and press to confirm. After a short delay and without actuation, the direct programming is deleted.  
Quit the TP menu.

## Switching Mute Function On / Off

After selection of a TP or EON transmitter, the mute function can be activated by pressing the **TP** button briefly.



Thereafter, only traffic announcements and navigation announcements will be switched through. By pressing the **TP** button again, the mute function is cancelled.

## Interrupting TP Announcements

Briefly press the **TP** button briefly.

The announcement currently being broadcast will be interrupted and the system will automatically return to the previously selected mode.

## Radio Mode

### TP Announcement Volume

Activate the TP menu. Press the multifunction button **Vol**.



With the right rotary control , four different settings (0 - 3) can be selected. This means that the volume can be raised to a fixed value according to the setting.

- Setting 0 - No increase
- Setting 1 - Slight increase
- Setting 2 - Medium increase
- Setting 3 - Strong increase

### Switching TMC On/ Off

**Note:** Further information on TMC can be found under "Dynamic Route Guidance" on Page 124.

Activate TP Menu



#### Switching on:

Repeatedly press the multifunction button **Tmc** until TMC on appears.

#### Switching off:

Repeatedly press the multifunction button **Tmc** until TMC off appears.

**Note:** No dynamic navigation functions (Dynamic Route, Traffic Information) can be selected or called up.

## Display for receivable TMC stations



If the system is able to receive a TMC station and TMC has been activated as described in "Switching TMC On/ Off" on Page 136, this is indicated on the display by the abbreviation **TMC**. TMC information can be received and analysed by the navigation system. The reception of these traffic announcements is free of charge.

## Telephone Mute Function

If a telephone is installed in the vehicle and the mute function for the telephone is activated, the telephone function can be set in the User menu (Page 145).

With the setting **Mute** the radio will be switched to mute when a call comes in.

With the setting **Audio signal** the sound of the telephone will be heard through the radio unit if a call comes in (vehicle ignition must be on).

This can only occur if, in addition to the telephone, a hands-free unit with loudspeaker output is installed and connected to the radio. In both cases **PHONE** will be displayed.

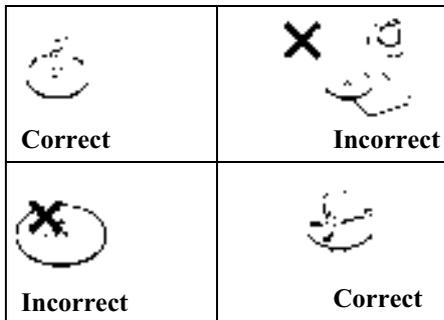


# CD Operation

## Instructions for Compact Discs (CD)

Sound interruptions may occur if the CD is dirty. To ensure optimum sound quality, please ensure the following:

- Handle the CD only by the edges. Never touch the playing surface and be sure to keep it clean.
- Never stick anything to the CD.
- Protect the CD from strong sunlight and heat sources such as heaters, etc.
- Before playing, clean the CD with a commercially available cleaning cloth, wiping from the centre outwards. Never use solvents such as petrol, thinners or other commercially available cleaners and anti-static sprays.



## Inserting/ Ejecting CDs

### Inserting a CD:

Insert the disc into the CD slot with the printed side upwards. The unit pulls in the CD automatically and begins to play the disc from the first track.

After the last track has finished playing, the unit will automatically repeat the CD from the first track.

If there is already a CD in the slot, press the **CD** button. If the CD changer / AUX operation was last selected, use the multifunction button **Src** to switch to CD operation.



### Ejecting a CD:

To eject a CD, press the  button, and the CD is ejected. Remove CD.

**Attention:** The CD is not ejected when the unit is switched off, but will remain in the CD slot.

## Track Skip - Forwards/ Backwards

Press the multifunction button **>|** (forwards) or **|<** (backwards)



By pressing the multifunction button repeatedly, several tracks can be skipped over in forward or reverse directions. Once the last track has been reached in the forward direction, the unit switches back to the first track. Analogously, it switches from the first track to the last track when going backward.

If a title has been playing for more than 10 seconds when the skip button is pressed, the unit will skip back to the beginning of the title playing.

## Scan Search

Press right rotary control **●**, **SC** will appear in the display.



All following CD tracks are played for 10 seconds each. To terminate the scan search, press the right rotary control **●** again.

## Fast Forward/ Rewind

By pressing the multifunction button **>** the Fast Forward function (audible) is activated, or by pressing the multifunction button **<** the Fast Rewind function (audible) is activated.



Fast forward / rewind is terminated by releasing the multifunction button.

## Random Play

By pressing the multifunction button **Rnd** the random play function is activated. Subsequently, the titles from the current CD will be played in random order. The prompt **Rnd** is displayed inversely.



By pressing the multifunction button **Rnd** again, the "Random Play" function is deleted.

## CD Operation

### Title Repeat

By pressing the multifunction button **RPT**, the "Title Repeat" is switched on. The prompt **RPT** is displayed inversely.



By pressing the multifunction button **RPT** again, the "Title Repeat" function is deactivated.

### Number of Titles and Total Playing Time

In the CD mode, press the **CD** button. By pressing the multifunction button **Trk** the elapsed playing time will be briefly displayed.



By pressing the multifunction button **Tt1**, the number of titles and total playing time for the current CD will be briefly displayed.

### Temperature Protection Circuit

To protect the laser diode from excessive heat, a temperature protection circuit has been implemented into the unit.

On activation of the temperature protection circuit, **TEMP** will appear for 8 seconds and the unit will be switched back to the radio or other audio source.

After a cool down period, single CD operation or CD changer operation can be called up again. If the temperature is still too high, the unit will once again switch back to radio or another audio source.

## Operational Readiness of CD Changer

If a CD changer is connected to the car radio, the CD changer is ready for operation as soon as the filled CD magazine is loaded. Close the sliding tray after loading. Further operation is performed via the car radio control panel.

## Loading / Ejecting the CD Magazine

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.

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

**Note:** To allow for the fastest possible change of CDs, the magazine should be loaded successively, beginning with Compartment 1.

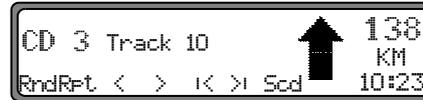
## Playing CDs

Press the **CD** button. If the CD Changer operation was selected last, or if there is no Navigation CD inserted into the CD player, the unit will be in CD Changer menu.

If CD Operation was selected last, the unit must be switched to CD Changer operation by pressing the multifunction button **CDc** to switch to CD changer operation.

The last CD played will be played from the position at which it was left before the unit was switched off.

Loaded CDs can be selected by turning the right rotary control **⦿**. During the selection time, Loading CD X is displayed. The magazine compartment number or the name of the CD and the number of the current track on the selected CD are then displayed.



If no CD is loaded in the selected magazine compartment (i.e. Compartment 2), NO CD 2 will briefly appear on the display. After the last title of a CD has been played, the next CD will automatically be selected and played.

For additional operating instructions, see CD Operation (Page 138):

- "Instructions for Compact Discs (CD)" on Page 138
- "Track Skip - Forwards/ Backwards" on Page 139
- "Scan Search" on Page 139
- "Fast Forward/ Rewind" on Page 139
- "Random Play" on Page 139
- "Title Repeat" on Page 140
- "Number of Titles and Total Playing Time" on Page 140

# CD Changer Operation

## Naming a CD

Press the **CD** button. Then, press the multifunction button **Nam**.



To give a name or change an existing name, press the multifunction button **Edt**.



The individual entries can be selected by pressing the multifunction buttons **<-** and **->**, selecting the desired position (inverse editing symbol).



Using the right rotary control **⬇**, select the desired letters and press to confirm.

Press the right rotary control **⬆** to move one position further. A maximum of 8 characters can be entered. After exiting the CDC menu, the name is stored.

To delete an existing name, press the multifunction button **Nam**.

Using the right rotary control **⬇**, select the name to be deleted.



By pushing the multifunction button **Del**, the name can now be deleted.

## CD Filter Function

Press the **CD** button. Then, press the multifunction button **Fil**.



For the Silverstone 2660 CD changer, the individual tracks of the current CD can be selected using the right rotary control . By pressing the right rotary control  selection can be made between **Play** (Title unfiltered) and **Skip** (Title filtered out).

To switch the filter function on or off, repeatedly press the multifunction button **Fil** to switch the filter function on (**Fil on**) or off (**No Fil**).

For the Silverstone 2630 and 2640 CD changer, you can selected between **Play** (Title unfiltered) and **Skip** (Title filtered out) for the current title by pressing the right rotary control .

**Attention:** The filter function can only be activated when the selected CD has been assigned a name

## User Menu

### Call Up / Exit User Settings Menu

After calling up the User Menu, the following Basic Settings can be set up in two levels according to your personal preference.

First level:

- Gal - Speed dependent volume control (GAL)
- Tel - Adjusting telephone function settings
- Led - Adjustment of Blinking Diode
- M/S - Adjustment for optimising reception
- Nav - Adjustment of Navigation Announcements
- Aux - Adjustment of the AUX input

Second level:

- Cmp - Adjustment of the Compass Display
- BeU - Adjustment of signal tone volume

The User Menu is called up by pressing the **SOUND** button for more than 2 seconds.



To access the second level of the User Menu, press the multifunction button **->**.

To exit the User Settings menu, press the **SOUND** button again.

### Setting the GAL (Gal)

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.

Call up User Menu. Press the multifunction button **Gal**. With the right rotary control **0** select between **0** and **+15**.



With the GAL setting, the start of volume adjustment can be specified according to vehicle speed.

The setting is stored automatically.

Explanation:

- **0** - No volume increase
- **+1** - Volume increase begins at low vehicle speed
- **+15** - Volume increase begins at higher vehicle speed

## Telephone Mute Function (Tel)

If a telephone system with hands-free unit is installed in the vehicle, the telephone conversation can be conducted via the car radio system. As such, there is no need to install an additional loudspeaker. However, the signal leads (AF – Telephone input and Earth – Telephone input) must be connected to the car radio (see page 154).

To display compass, call up User Menu. By pressing the multifunction button **Tel**, select either **Audio Signal** or **Mute**.



- **Mute** - Telephone Mute setting
- **Audio signal** - Telephone conversation via car radio

## Adjusting Reception Optimisation (M/S)

Three different reception optimisation settings can be selected in order to suppress reception-dependent interference and reflections:

Call up User Menu. By pressing the multifunction button **M/S** select between **Stereo**, **Mono** and **Auto**.



- **Auto**: Setting for normal operation - i.e., the system switches from stereo to mono and back depending upon reception location (provides the optimum setting for almost all reception areas).
- **Stereo**: Setting for exceptional reception conditions - i.e. the unit is constantly set to stereo.
- **Mono**: Setting for reception conditions in which reflections constantly occur - i.e., the unit is constantly set to mono.

The setting is immediately effective and is retained when the unit is switched off.

## User Menu

### Adjusting the Led

With this function, the flashing of the LED (flashes when unit is switched off) can be switched on or off.

Call up User Menu. By pressing the multifunction button **Led** select either **Blinking** (LED On) or **off** (LED Off).



The setting is stored automatically.

### Setting Navigation Announcements (Nav)

With this function you can select how you wish to hear navigation announcements.

- **only** - The audio source being listened to is turned off and the navigation announcements can be heard.
- **mixed** - The audio source being listened to is lowered. The navigation announcement is set to the same volume level as the previously heard audio source but still adjustable within a range of +/-6 dB. If the audio source volume is then changed, the navigation announcement volume is adjusted accordingly.
- **independ** - The audio source being listened to and the navigation announcements can be set to different levels.

To set, call up User Menu. Using the multifunction button **Nav** select from **Only**, **Mixed** and **Independ**.



The setting is stored automatically.

### AUX Input (Aux)

This can be used to switch on the CD changer AF connections if no CD changer is connected. An external unit (Discman, Walkman, etc.) can then be connected.

To set, call up User Menu. With the multifunction button **Aux** select either **AUX Mode on** or **Aux Mode off**.



The setting is stored automatically.

In CD operation, the multifunction button **Aux** must be pressed to select AUX operation.

## Display Compass

When the Route Guidance is not active, a compass can be shown on the right side of the display.

To set, call up User Menu. By pressing the multifunction button **→**, call up the 2nd level of the User Menu. Using the multifunction button **CMF** select either **show COMPASS** (Compass is displayed) and **hide COMPASS** (Compass is not displayed).

If the compass display is switched off and Route Guidance is not currently active, radio station abbreviations can be assigned to 9 multifunction buttons in FM - DAS mode.



The setting is stored automatically.

## Signal Tone Volume

With this function, the volume of signal tones (e.g. storage confirmation) can be set.

To adjust, call up User Menu. By pressing the multifunction button **→**, call up the 2nd level of the User Menu. Press the multifunction button **BeV**. With the right rotary control **●** select either **0** (Quiet) or **+5** (Loud).



The setting is stored automatically.

## Service Menu

### Call Up / Exit Service Menu

The following information can be called up in the Service Menu.

- **Model-No.:** - Display of the model number
- **Serial-No.:** - Display of the serial number
- **Changer Reset** - Reset for CDC (if available). For Reset, press the multifunction button **Res**.
- **GAL** - Display of the current GAL adjustment
- **Radio Software** - Display of radio software status
- **Radio Bolo** - Display of radio Bolo status
- **Navi Rom** - Display of Navi Rom/Lib status
- **Navi Flash** - Display of Navi Flash status
- **RTC Value** - Display of RTC value

To set the Service Menu, simultaneously press the button **NAV** and the multifunction button 10 during radio operation.



The individual entries can be selected by pressing the multifunction buttons **Nxt** and **Prv** or by turning the right rotary control **⬇**.

To exit the Service Menu, press the multifunction button **End**.

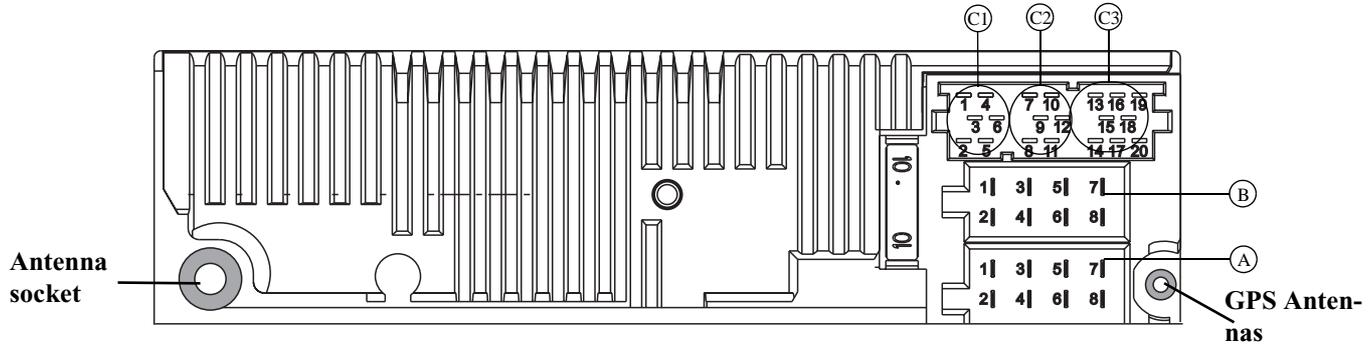
### Triggering Reset

If a malfunction of the unit should occur, such that the unit is no longer capable of operation or is defective in some other way, a restart of the internal unit software (reset) can be triggered via the following button combination:

To trigger a reset, press the multifunction button **1**, multifunction button **3** and the **TP** button at the same time.

After a reset of the unit software, the code number must be entered and the Navigation CD re-inserted.

# Connection Instructions



**Warning!** Terminal 30 and Terminal 15 must always be connected separately, otherwise increased power consumption will occur when the unit is switched off. Connection socket A is not the same for all vehicle types. Therefore, always measure voltages before installation.

## Socket A

- 1 Speed Signal (GAL)
- 2 Reversing lamp signal
- 3 Telephone mute / clearing function
- 4 Permanent positive (Terminal 30)
- 5 Control output for automatic antenna/ amplifier
- 6 Illumination (Terminal 58)
- 7 Switched positive (Terminal 15)
- 8 Earth (Terminal 31)

## Socket B

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

- 6 Loudspeaker left front -
- 7 Loudspeaker left rear +
- 8 Loudspeaker left rear -

## Socket C1

- 1 LineOut left rear
- 2 LineOut right rear
- 3 AF Earth
- 4 LineOut left front
- 5 LineOut right front
- 6 Subwoofer LineOut

## Socket C2

- 7-12 Specific connection for Becker CD changer

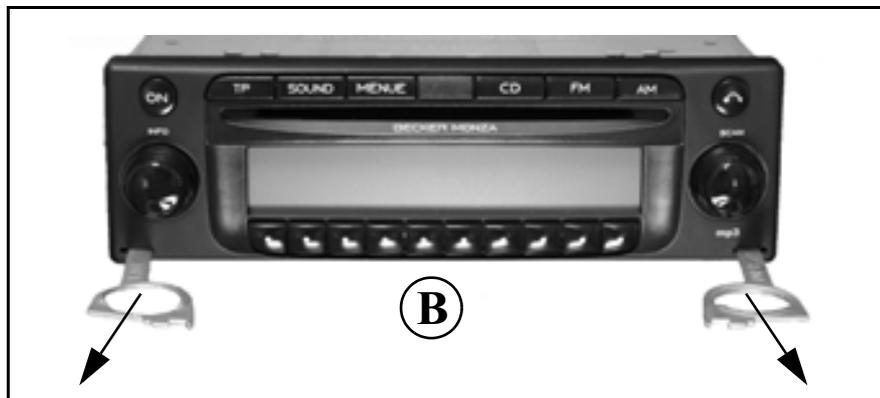
## Socket C3

- 13 AF – Telephone input
- 14 Earth – Telephone input
- 15-17 Specific connection for Becker CD changer
- 18 CD AF Earth (AUX)
- 19 CD AF left (AUX)
- 20 CD AF right (AUX)

## Installation and Removal Instructions

A universal bracket for DIN installation slots is integrated into this car radio. An installation frame is not required. The unit is inserted into the installation slot and secured with the slides supplied.

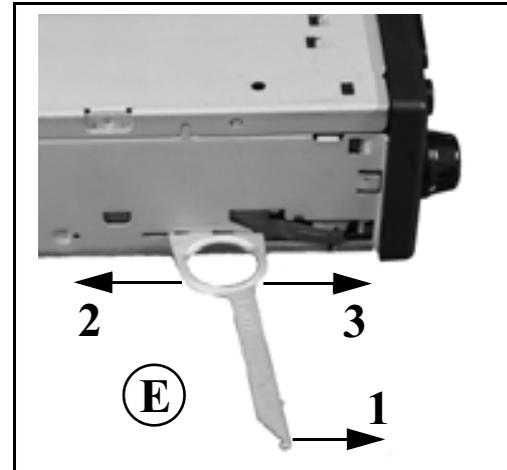
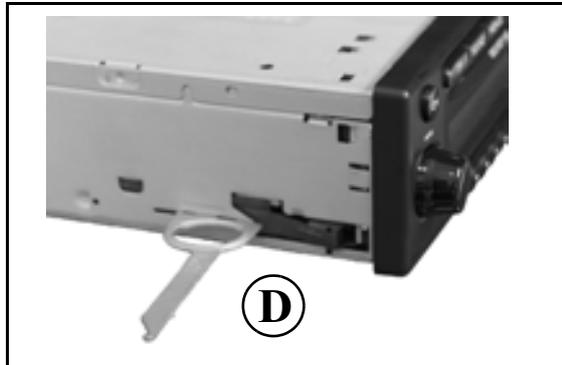
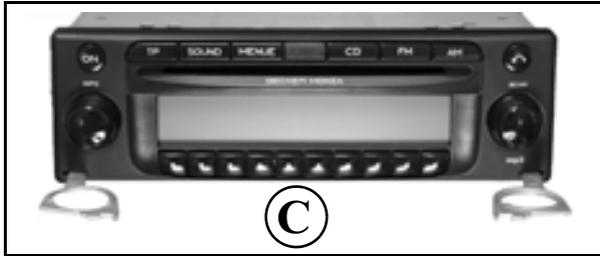
To install, complete all electrical connections. Then push the unit into the installation slot. Afterwards, insert slides into the openings on the front of the unit until the first detent position is reached (Figure A). Now lock the radio by pulling both slides, as shown in Figure B. Subsequently, remove the slides.



## Installation and Removal Instructions

To remove the unit, it must first be unlocked. To do this, push in both slides to the second detent position as shown in Figure A. Subsequently, withdraw the unit using both slides (Figure C). Then remove the slides by pressing the springs on the right and left sides of the unit.

If the unit was previously installed in another vehicle, it may be necessary to adjust the springs on the unit before installation. To adjust the springs, insert slide as shown in Figure D and afterwards adjust as shown in Figure E (gently press slide in the direction of “1”, whilst at the same time moving the slide in the direction of “2” or “3”).



## General Instructions

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### RDS SYSTEM

This car radio is capable of receiving RDS signals (RDS = Radio Data System) in the VHF range. RDS is a technique which enables the transmission of inaudible additional information in the VHF broadcasting range. This means that the transmitting station sends information capable of being analysed by the car radio.

### DAS Seek Qual. Level

At the level **DAS Seek Qual.**, all receivable and identifiable RDS programs are stored in a list according to their quality. The dynamic autostore, search and scan search functions access upon this list.

### DAS Seek Name Level

At the level **DAS Seek Name** all receivable and identifiable RDS programs are stored in a list alphabetically by name. The dynamic autostore, search and scan search functions access this list.

### RDS Stations Level

At the level **RDS Stations** only identified RDS stations can be stored. The unit constantly switches to the best receivable transmission frequency for the station.

During search for **RDS Stations** the unit will stop only at identifiable stations.

### Stations Fix Level

At the level **Stations Fix** frequencies can be assigned to the station buttons. RDS evaluation does not take place. The search for **Stations Fix** is equivalent to manual FM tuning (page 131).

### PTY (Program Type)

With the PTY function, it is possible to select specific types of programming, such as sport, pop music, classical music etc. The PTY is transmitted by the RDS station, provided this function is installed at the station facility. The selected transmitter programme type can be displayed or a search for a specific PTY transmitter can be performed.

Examples of Program Types are:

NEWS	News
POP M	Pop music
AFFAIRS	Politics and current events
ROCK M	Rock music
INFO	Service programs
SCIENCE	Science
EDUCATE	Education
LIGHT M	Light music
DRAMA	Radio plays and literature
CLASSICS	Classical music
CULTURE	Culture, Religion, Society
EASY M	Easy listening
VARIED	Humour
SPORT	Sports
OTHER M	Special music programming
WEATHER	Weather reports
FINANCE	Business/ financial information
CHILDPRG	Children's programming
SOCIAL	Social reports
RELIGION	Religious reports

PHONE IN	Interviews
TRAVEL	Travel reports
LEISURE	Leisure reports
JAZZ	Jazz music
COUNTRY	Country music
NATION M	National folk music
OLDIES	Oldies
FOLK	Folk music
DOCUMENT	Documentation
NO PTY	No PTY

## Technical Data

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<b>Wavebands</b>	:	FM 87.5 MHz - 108 MHz MW 531 kHz - 1620 kHz LW 153 kHz - 282 kHz SW 5800 kHz - 6250 kHz
<b>Frequency range</b>	:	20 Hz - 20 kHz for CD operations 30 Hz - 15 kHz for FM 50 Hz - 2.5 kHz for MW, LW, SW
<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 (U <sub>a</sub> max 3V <sub>eff</sub> at 10 kΩ)
<b>GAL</b>	:	In order to utilise the GAL, a square wave voltage with a mass-related amplitude of +4 V - +12 V must come from the electronic tachometer of the vehicle. Volume increase takes places in 7 increments of 2.5 dB each.
<b>Antenna</b>	:	Impedance 50 Ω
<b>AF-Telephone input</b>	:	Max. input voltage of 8 V (if interference occurs, a commercially-available 1 : 1 carrier should be connected to the signal lead).
<b>AUX Input</b>	:	16 KΩ Input resistance, max. input voltage 1.7 V <sub>eff</sub>
<b>Telephone Mute</b>	:	Low active level < 2 Volt
<b>Supply voltage</b>	:	12 Volt
<b>CD Connection</b>	:	The Becker Silverstone 2630, 2640, 2660 and 7860 CD changers can be connected.
<b>Playable CDs</b>	:	Only those CDs which comply with DIN EN 60908 can be used. The use of 8 cm CDs with adapter is not recommended.

# NOTICE

Dear Listener,

In conformance with current EC guidelines, any person may operate this radio receiver.

This unit conforms to the current valid European or harmonised national standards. This designation is your guarantee that the unit conforms to the applicable specifications concerning electromagnetic compatibility. This means that interference with other electrical/electronic devices caused by the unit, or interference with this unit caused by other electrical/electronic devices is largely prevented.

- The EC type-approval mark (e1) issued by the Federal Office for Transport (KBA) in accordance with European Directive 95/54/EC governing the EMC of motor vehicles authorises installation and operation of the unit in motor vehicles (classes M, N and O).
- With regard to the following European standards, the EMC requirements that apply specifically to this unit have been met:
  - EN 55013
  - EN 55020



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