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iDrive, Central Information Display and Controller

E60, E61, E63, E64, E87, E90, E91, E92



Introduction

iDrive was introduced with the E65.

Due to the position of the screen and the controller as well as the operations logic, iDrive is the leading control system in vehicles.

iDrive was consistently developed for the E60 and the ranges which follow:

Due to the increased number of functions in the vehicle, improvements were also made to the ergonomics. The menu structure contains 5 menus in contrast to the E65 which contains 8 menus.

iDrive is characterised by:

- clear differentiation and optimum layout of the driving area for driving and convenience
- Calmer atmosphere inside the vehicle due to a reduced number of switches
- straightforward, logical controls
- ergonomic positioning and design of display and control elements
- integrational approach: the front passenger has access to all convenience functions

iDrive is also employed on the new BMW 1-Series and 3-Series.

In conjunction with the Multi-audio system controller (M-ASK) or Car Communication Computer (CCC), there is a display for the iDrive.

On the BMW 1-Series the folding Central Information Display (CID) is located in the middle of the dashboard. On the BMW 3-Series, the Central Information Display is fixed and integrated into the dashboard. [system overview ...]

Brief description of components

iDrive consists primarily of the following components:

Central Information Display (CID)

The CID is the central graphic display unit. A number of displays are available depending on the equipment fitted:

E60, E61, E63, E64, E90, E91, E92	CID colour 6.5 inch, fully integrated [more] (combined with option 606 "Business navigation system" with arrow display) in conjunction with M-ASK	CID colour 8.8 inch, fully integrated (combined with option 609 "Professional navigation system" with map view) in conjunction with CCC
E87	CID colour 6.5 inch, folding [more] (with option 606 "Business navigation system" with arrow display in conjunction with M-ASK) (with option 609 "Professional navigation system" with map view in conjunction with CCC) no Assistance window and therefore no split-screen display	

The Central Information Display is connected via a LVDS data line (Low Voltage Differential Signalling) to the M-ASK or CCC.

- Controller with menu button

The controller is the **central control element** for the Central Information Display or iDrive. The controller is located in the centre console behind the gear lever or, in the case of automatic transmission, the selector lever.

The menu button is located behind the Controller (with CCC, two-part option: menu button and Push-to-talk button for voice recognition system).

The controller is connected via the K-CAN to the M-ASK/CCC.

The controller is operated in the same way as on the 7 Series by slide or turn and then press.

The Controller always returns to its home position when released. The basic variant of the Controller, however, only has 4 sliding directions: forward, back, to the right and to the left.

[more ...]

In the High version, the controller has 8 directions of movement for the following function: destination input using crosshairs.

- Loudspeakers

The loudspeakers output the audio signals from the M-ASK or the CCC, as applicable.

The control unit that manages the functions of iDrive depends on the vehicle equipment:

M-ASK: Multi-audio system controller

The M-ASK combines a number of functions in a single control unit, as follows:

- Audio system controller (ASK)
- Control unit for the Central Information Display
- Navigation system with DVD drive
- Aerial tuner

CCC: Car Communication Computer

The CCC incorporates further functions at the top end of the range in the form of a control unit (e.g. voice recognition system).

The M-ASK or the CCC generates the LVDS data (Low Voltage Differential Signaling) for graphical presentation on the Central Information Display.

System functions

The further development of the iDrive for the 5 Series, 6 Series and 1 Series comprises:

- revised menus
- hierarchical structure of the menus
- Additional orientation guides

Revised menus

The start menu consists of 4 menus.

The 4 menus on the Central Information Display are situated on intersecting axes in the same way as the 4 points of the compass (as viewed in the clockwise direction) as follows:

Communication

Slide the Controller forward (= "north"): e.g. functions such as telephone, short text message or BMW Assist

Navigation

Slide the Controller to the right (= "east"): e.g. functions such as route, on-board information or address book

Entertainment

Slide the Controller back (= "south"): e.g. functions such as radio, CD or TV

Climate

Slide the Controller to the left (= "west"): e.g. functions such as air distribution or heat distribution for seats

[more ...]

There is also an additional fifth menu for selecting the individual user presets.

Settings (i= Information)

Press Controller in the start menu: e.g. functions such as "Settings for entertainment", "Settings for display" and "Settings for vehicle"

The start menu will always appear when the menu button behind the controller is pressed.

Exceptions to this are the submenus in menu 5: When the Controller is pressed, menu 5 "Settings" is initially called up. If the controller is pressed once more, the start menu is called up.

Hierarchical structure of the menus (operating logic)

The operating logic has a strictly hierarchical menu structure.

Displaying the menu path

The current position in the menu structure can be seen by displaying the menu path (list of menu items selected to date in the individual menu lines, reading from top to bottom).

Navigating through the menus

Slide the Controller to switch from one menu to another.

Sliding the Controller forward means: Go one level higher in the menu hierarchy. Sliding the Controller to the rear means: Go one level lower in he menu hierarchy.

In split-screen mode, sliding the Controller to the right selects the assistance window. Slide the Controller to the left to exit the assistance window (assistance window displays additional information).

Changing the settings

If you want to change settings or view them in the submenus, turn the controller and press it down.

Additional orientation guides

The following features provide visual orientation in the menus:

Orientation by special background colours

Each menu has a background colour of its own.

Communication = blue

Navigation = green

Entertainment = orange

Climate = red

Settings = grey

The associated submenus also have the same background colour. This makes assignment of the submenus straightforward.

Orientation by position indicator

A small, coloured symbol for each of the 4 menus appears in the top menu line: A diamond. The 4 corners of the diamond correspond to the 4 directions of the menus. A small square indicates the corner corresponding to the currently selected menu.

Status line for information at a glance

The status line contains the most important information on the various functions, such as settings of the air conditioning system or the radio station currently selected.

The start menu always appears when the menu button behind the controller is pressed.

Notes for service staff

The following information is available for service staff:

- General note: [more ...]
- Diagnosis: ---
- Encoding/programming: ---

National versions

The language package for the possible display languages is encoded at the end-of-line. Subject to change.