

Technical training.
Product information.

F25 Displays, Indicators and Controls



BMW Service

Edited for the U.S. market by:
BMW Group University
Technical Training
ST1106 2/1/2011

General information

Symbols used

The following symbol is used in this document to facilitate better comprehension or to draw attention to very important information:



Contains important safety information and information that needs to be observed strictly in order to guarantee the smooth operation of the system.

Information status and national-market versions

BMW Group vehicles meet the requirements of the highest safety and quality standards. Changes in requirements for environmental protection, customer benefits and design render necessary continuous development of systems and components. Consequently, there may be discrepancies between the contents of this document and the vehicles available in the training course.

This document basically relates to the European version of left hand drive vehicles. Some operating elements or components are arranged differently in right-hand drive vehicles than shown in the graphics in this document. Further differences may arise as the result of the equipment specification in specific markets or countries.

Additional sources of information

Further information on the individual topics can be found in the following:

- Owner's Handbook
- Integrated Service Technical Application.

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The information contained in this document forms an integral part of the technical training provided by the BMW Group and is intended for its course trainers and participants. Refer to the latest relevant information systems of the BMW Group for any changes/additions to the Technical Data.

Status of the information: **July 2010**
VH-23/International Technical Training

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F25 Displays, Indicators and Controls

1. System overview

1.1. Introduction

As with all other BMW models, the operating concept of the new BMW X3 is based on a clear optimized layout of the driving area. The number of switches has been reduced in order to simplify logical operation. The display and operating elements are organized in a hierarchical arrangement corresponding to their function.



F25 Overview of display and operating elements

Index	Explanation
1	Head-Up Display HUD
2	Central information display CID
3	Operation of heating and air conditioning system
4	Gear selector switch GWS
5	Controller CON
6	Control buttons, steering wheel
7	Instrument panel (KOMBI)

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2. System Components

2.1. Instrument panel

The central display unit with speed reading, speed sensor, fuel gauge, engine oil temperature, and indicator and warning lights is referred to as the instrument panel.

The instrument panel receives information on the wiring harness in the form of analogue and digital electrical signals. These signals are processed and displayed in the instrument panel or passed on as information to other control units.

The F25 instrument panel is the same as the instrument panel of the F07 and F10 and, as a control unit, is a bus component of the MOST bus and PT-CAN.

It incorporates a 5.7" TFT display screen with a resolution of 640 x 160 pixels located just below the round instruments. The round instruments are always enclosed by a closed ring.



F25 Instrument panel

Index	Explanation
1	TFT display
2	Closed instrument rings

2.1.1. Brake Energy Regeneration display

The brake energy regeneration display is standard on all F25 vehicle and is installed in the instrument cluster just below the tachometer.

The energy recovery indicator is faded into the current consumption display in coasting (overrun) mode.

The kinetic energy of the vehicle is converted into electrical energy in coasting (overrun) mode. The vehicle battery is partially recharged and the fuel consumption can be reduced.

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2. System Components



F25 Brake energy regeneration display

2.1.2. On-board computer

The F25 is equipped as standard with an on-board computer.

The on-board computer functions can be called up by briefly pressing the on-board computer button on the steering column switch.

Pressing the on-board computer button again displays information in the following order:

- Range
- Average consumption
- Average speed
- Distance (with activated route guidance)
- Arrival time (with activated route guidance)
- Date
- Time display

In vehicles with CID the functions to be displayed can be selected via "Settings" -> "Info Display".

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2. System Components



F25 Buttons on steering column switch

Index	Explanation
1	On-board computer button
2	High-beam assistant button
3	Steering column switches

For more detailed information, refer to the current version of the BMW X3 Owner's Manual.

2.2. Central information display

Depending on the equipment installed, two different versions of the central information display CID are installed in the F25.

As on all new BMW models with iDrive, the system is operated by means of the central operating element, the controller.

The central information display is an integrated display and operating facility for the following functions:

- Audio functions, such as radio, CD, MP3 for example
- Telephone and data services
- Navigation
- On-board computer, journey computer
- Vehicle information, Interactive Owner's Manual
- Heating and air conditioning system
- Vehicle functions, for example PDC and EDC
- BMW Assist.

2.2.1. CID with 8.8" screen diagonal

A CID with 8.8" screen diagonal is available as an option and installed in conjunction with the Navigation system (SA 609). The display resolution is 1280 x 480 pixels.

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2. System Components



F25 CID with 8.8" screen diagonal

2.2.2. CID with 6.5" screen diagonal

A CID with 6.5" screen diagonal is standard equipment and is installed in conjunction with the BMW Professional radio (SA 663). The resolution of this display is 800 x 480 pixels.



F25 CID with 6.5" screen diagonal

2.3. Head-Up Display

The very name "Head-Up" describes the principle benefit of this system. The Head-Up Display HUD projects a virtual image into the driver's field of view. Important information, e.g. from the cruise control or navigation system when the arrow display is active, is reflected on the windscreen and is therefore permanently in the driver's field of view.

The Head-Up Display is available as option (SA 610) in the F25 and contains various functions aimed at enhancing road safety and ride comfort.

The following items are displayed :

- Vehicle speed
- Set speed regulation by the cruise control with braking function (DCC)
- Information from the navigation system
- Check Control messages.

Having the displays in the driver's direct field of view increases safety, as the driver always focusses on the traffic conditions.

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2. System Components



Head-Up Display

For more information on the Head-Up Display, refer to the information bulletin entitled "Head-Up Display HUD" for the F01.

As there is no FAS strip in the F25, the Head-Up Display is operated via the controller and the operating menu. In the F25, the optional Head-Up Display can only be used in conjunction with a CID (SA 609, 663).

2.4. Steering wheel controls

A switch block is integrated into the steering wheel on the left and right-hand side.

The operating elements for the Cruise control with braking function (Dynamic Cruise Control DCC) are on the left-hand side of the steering wheel.

The controls for the radio and telephone functions are on the right.



F25 steering wheel mounted controls

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2. System Components

Index	Explanation
1	Rocker switch \pm , change speed, set speed
2	Knurled wheel, select/set radio station or music track
3	MODE button, change between audio sources
4	Shift paddle for upshifting (only with SA 2TB)
5	Rocker switch +, increase volume
6	Rocker switch -, reduce volume
7	Voice input system button
8	Telephone button
9	Enable/disable or interrupt DCC
10	Resume button, call-up stored speed
11	Set speed button
12	Shift paddle for downshifting (only with SA 2TB)

2.5. Center console controls

The center console of the F25 is equipped with the following controls:



F25 Operating elements of the center console

Index	Explanation
1	Gear selector switch
2	Controller
3	Parking brake
4	Automatic Hold

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2. System Components

Index	Explanation
5	Park Distance Control
6	Hill Descent Control
7	Drive dynamic control switch
8	Dynamic Stability Control

2.6. Service information

2.6.1. Test functions

The test functions are shown in the TFT display of the instrument panel. The test functions are used by BMW Service to check the encoding. The test functions also provide help in troubleshooting without a BMW diagnosis system.

To start functional check

- Terminal 15 ON
- Press and hold down the reset button in the instrument panel for 10 seconds

All the described test functions can also be performed via the BMW diagnosis systems.

Locking and unlocking the test functions (test function 04)

Only the first four test functions are freely accessible. All test functions are locked from the fifth test function onwards. The test functions can be unlocked via test function 04.

The test functions are unlocked by entering the cross total above the vehicle identification number.

Display of test functions

The test functions are faded into the centre of the TFT display, between the two round instruments.

The main test functions are listed below. In addition to the majority of test functions, further equivalent functions exist and a similar display appears for each one individually in the instrument panel.

Test function	Description
01	Identification
02	System test
03	Test End
04	Unlock test functions
05	Current consumption
06	Range consumption
07	Fuel gauge values

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2. System Components

Test function	Description
08	Coolant temperature, ambient temperature
09	On-board computer average values
10	Speedometer / revolution counter
11	Display of operating voltage
12	Trigger audio signals
13	Read fault codes
14	Dim LCD
15	Dim PWM signal
16	Condition Based Service
17	Check Control
18	Correction factor, consumption figures
19	Software reset / RAM reload

Operation of test functions

The test functions are operated with the assistance of the reset button in the instrument panel.

Press the reset button briefly once to scroll through the test functions. Hold the reset button pressed down for longer to access the selected test function.

Exit test functions

- Terminal 15 OFF
- Hold reset button pressed for longer than 10 seconds. The main menu fades into the instrument panel
- Call up test function 03 (end test)
- Call up test function 19 (RESET).



To protect against unauthorized access, all but the first four test functions are locked again when the test functions are exited.

2.6.2. Resetting the scope of maintenance work

If the service has been carried out for one or more scopes of maintenance work, replacement of front brake pads for example, the full service interval must be reset for these scopes.

When resetting the scopes of maintenance work, a differentiation is made between 2 types:

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2. System Components

- Statutory scopes of maintenance work, such as the technical vehicle inspection, can only be reset in the "Service" menu.
- All service-related scopes of maintenance work, such as changing the spark plugs for example, are reset via the reset mode in the instrument panel.

Activating reset mode

- Terminal 15 ON
- Press and hold down the reset button in the instrument panel for between 5 and 10 seconds

Hold the reset button pressed for longer than 10 seconds to access the test functions.

Press the reset button briefly once to scroll through the scopes of maintenance work. Hold the reset button pressed for longer to access the reset menu for the selected scope of maintenance work. Press and hold the button again to reset the scope of maintenance work. It is only possible to reset the scopes of maintenance work once thresholds for specific scopes of maintenance work have been undercut.

Exit reset mode

- Terminal 15 Off
- Start engine
- Do not press button for 15 seconds



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