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## Model support

**E9xDGA**

**3 E-Series**



M3-Series

All models with following engines are supported:

Turbo- Gasoline engine

Product description

E9xDGA Product description

Data display:

- Boost pressure
- Tourque
- Performance
- Sprint
- Lateral and Longitudinal acelaration
- Performace chart
- Maximum values

Visually, the display fits perfectly into the Interior. The monitor, which is equipped with latest OLED technology is incorporated into the existing ventilation shaft. Thus, no external holders are necessary, and you have a good view of the displays while driving.

To operate the Displaysystem, you just have to use the steering wheel buttons. Thus, control of the vehicle by the driver is always maintained.



## System components

### Torque display

1 Battery voltage

2 Torque bar

5 Cooling water temperature



3 Peek holder bar

4 Torque

6 Oil temperature

1 Indicates the current battery voltage

2 Graphically represents the torque between 0 and 650 Newton Mertes, and is equipped with a towing pointer

3 Holds the early maximum of loading pressure for 2 seconds

4 Indicates digital torque between 0 and 650 Newton metres

5 Specifies the current cooling temperature in °C

6 Specifies the actual oil temperature between - 40 °C and 130 °C

### Performance Meter

1 Battery voltage

2 Power bar

5 Cooling water temperature



3 Peek holder bar

4 Power

6 Oil temperature

1 Indicates the current battery voltage

2 Represents the power between 0 and 400 PS and is equipped with a peek holder bar

3 Holds the early maximum of loading pressure for 2 seconds

4 Specifies the power digital between 0 to 400 PS

5 Specifies the current cooling temperature in °C

6 Specifies the actual oil temperature between - 40 °C and 130 °C



## System components

### Sprint display



- 1 Specifies currently speed in km/h according to the speedometer
- 2 Specifies the time depending on the current speed
- 3 Indicates the ever reached maximum speed in km/h
- 4 Specifies the best Sprint time from 0 to 100 km/h or 0-200 km/h
- 5 Specifies the maximum reached longitudinal acceleration in g ( $g = 9,81 \text{ m/s}^2$ )

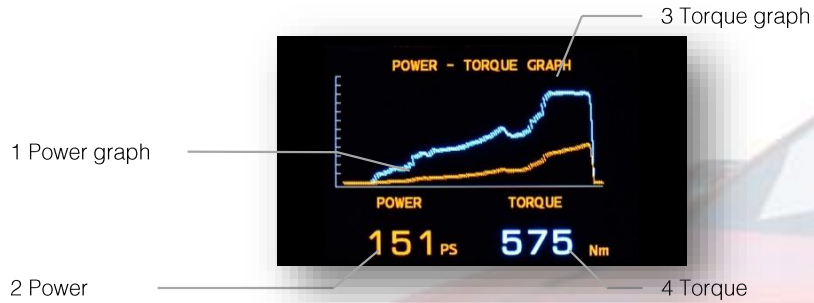
### Lateral and Longitudinal acceleration



- 1 Specifies the longitudinal acceleration in G ( $G = 9,81 \text{ m/s}^2$ )
- 2 Graphically represents the longitudinal acceleration, between 0,8G backwards and 0,8G forwards and is equipped with a drag indicator ( $G = 9,81 \text{ m/s}^2$ )
- 3 Hold for 2 seconds the provisional maximum of longitudinal acceleration
- 4 Specifies the lateral acceleration in G ( $G = 9,81 \text{ m/s}^2$ )
- 5 Graphically represents the lateral acceleration between 2,0G to the left and 2,0G to the right, and is equipped with a towing pointer ( $G = 9,81 \text{ m/s}^2$ )

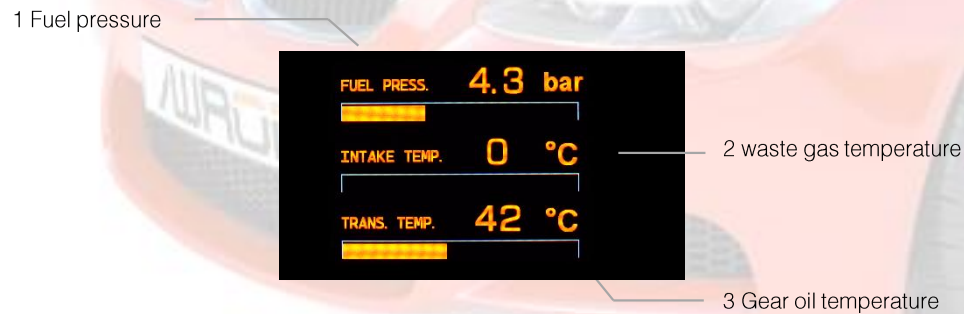
## System components

### Performance chart



- 1 Graphically represents the power
- 2 Specifies the power digital between 0 and 400 PS; the provisional maximum value is kept
- 3 Graphically represents the torque
- 4 Specifies the torque digital between 0 and 600 Nm; the provisional maximum value is kept

### Pressure and temperature display



- 1 Specifies the current fuel pressure between 0 and 10 bar
- 2 Specifies the current intake temperature between 0 °C and 130 °C
- 3 Specifies the current intake temperature between 0 °C and 130 °C

## System components

### Lamda display

1 wideband  
oxygensensor Bank 1



3 wideband  
Oxygensensor Bank 2

2 waste gas  
temperature

- 1 Specifies the current value of wideband oxygen sensor Bank 1; measures the residual oxygen content in the exhaust gas;  $\lambda > 1$  = lean mixture;  $\lambda < 1$  = oily mixture; Range is between 0.65 and 2.5
- 2 Specifies the current exhaust gas temperature between 0 ° C and 130 ° C
- 3 Specifies the current value of wideband oxygen sensor Bank 2; measures the residual oxygen content in the exhaust gas;  $\lambda > 1$  = lean mixture;  $\lambda < 1$  = oily mixture; Range is between 0.65 and 2.5

### Maximum values

1 Maximum values



*** MAX VALUES ***		
WATER TEMP.	70	°C
OIL TEMP.	78	°C
SPEED	32	mph
LONG. ACCEL.	0.30	g
LATER. ACCEL.	0.40	g
TORQUE	575	Nm
POWER	151	PS
FUEL PRESS.	4.3	bar
EXH. GAS TEMP.	580	°C
INTAKE TEMP.	0	°C

- 1 Specifies the maximum value of the current drive; When the switch off the ignition deletes these values



## System components



1 Switch off display

Switch off display

- 1 During the brief wait about 2 seconds, the display turns off; by pressing the wheel button it is possible to turn the display back

## Operating concept

# E9xDGA Key functions

To operate the Display E9xDGA you just have to use the steering wheel buttons. Each a press of a specified button ( for example the hash key) is enough, to switch between the displays. This allows an easy handling and ensures the control of the vehicle by the driver.

### Assignment of keys:

The buttons of the left, as well as by the right-hand wheel block can be used. By 5 seconds press any key, it is applied to the operation. The display reports the adoption of the key acoustically.

### Diagnose Mode:

Hold 10 seconds again to activate the workshop mode. The message „ DIAGNOSE MODE AKTIV!“ appears in the display. This allows vehicle work with the BMW- diagnose device. The diagnostic mode is finished by on and turn off the ignition

### Dimming:

To adjust the dimming, you have to press the allocated button for 3 seconds and an acoustic signal is heard. In the space of another 3 seconds, you can regulate the dimming by pressing the button. 3 Different levels are selectable.

By longer wait for 10 seconds, the dimming mode is deactivated.



## Operating concept

# E9xDGA Sprint function

The sprint display is operated only by the driving style of the driver. So they are not any external buttons for the operation necessary.

In the stand is the stopwatch, as well as the speed to 0. As soon as the driver accelerated the timing begins. For the first measurement, from 0 to 100 km/h, the driver will have 15 seconds. If the driver is not able to accelerate to 100 km/h, the measurement stops and the timer goes back to 0. Is the driver able to accelerate to 100 km/h, the second measurement from 0 to 200 km/h begins. For this speed the driver has 10 more seconds, so 25 seconds to speed up to 200 km/h.

The maximum achieved times, as well as the maximum longitudinal acceleration are stored and displayed at the bottom of the display. As well, the ever reached maximum speed is represented in the upper right area of the screen. These stored maximum values are automatically replaced by new highs.

To delete these peaks, it is only necessary to press the control button for 3 seconds. There is a short display change and therefore resets all values. This is done only in the Sprint display mode.

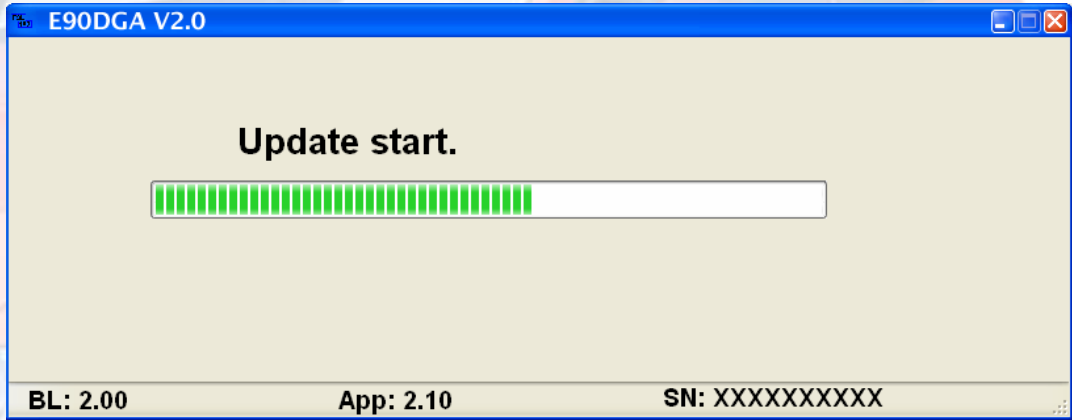


Operating concept

## E9xDGA Software update

Software updates are available for the operating systems Windows XP and Windows 7. Required software is available for download at [Awron.de](http://Awron.de). Then the computer has to be connected with the display system via USB and the required driver software installs itself automatically.

The software file must only be opened, and the update starts automatically.



## Purchased parts package

# E9xDGA Purchased parts package

### Purchased parts package

- Display system
- Cable harness incl. USB connection
- Operating instructions

This purchased parts package ensures an assembly true the motto of „plug and play“.

The wiring harness is connected directly to the can bus, which ensures a precise data transmission.





## Technical data

## E9xDGA Technical data

## Display

- OLED display 320 x 240

## Cutting point

- CAN – Bus 500 KBit
- USB cutting point for Software update

## Case

- Plastic, original BMW air grille

## Size (length x width x depth)

- 350 mm x 70 mm x 130 mm

## Weight

- 320 g

