

## ON-BOARD COMPUTER

The BMW on-board computer can make your trips more enjoyable, economical and safe by providing the following information and features:

- Anti-theft protection
- Maximum speed warning light and tone
- Trip average fuel consumption
- High fuel consumption warning light
- Average trip speed
- Estimated trip arrival time
- Estimated maximum travel distance with remaining fuel
- Exit distance with warning light and tone
- Programmable timer with warning light and tone
- Ambient outside temperature with warning light and tone to warn when temperatures approach freezing
- Digital stop-watch
- Digital clock

All 12 keys have more than one function. Each key can be used for a function and a numerical input, or to obtain an information display. The km/miles switch (A) determines whether the digital displays appear in metric or US standard.

In the "miles" mode, lightemitting diodes (E) come on to indicate whether the time is in AM (before noon) or PM (afternoon).



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Before every **input**, preferably **before starting each journey**, the function e.g. (B) followed by the numerical input e.g. (D, 1-0) which must be pressed within 8 seconds. The input is memorized when the light-emitting diode (C) comes on.

The LEDs do not come on for the functions ARR, RANGE and DIST.

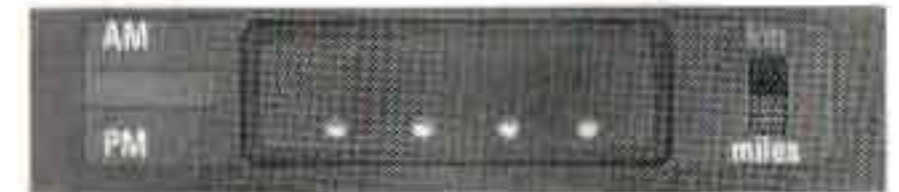
To obtain an information output, press the appropriate function key (B). The information display interrupts the actual time display for 8 seconds.

After each output display, the actual time must be allowed to appear again, or else a numerical input will take place when a key is pressed.

Red LED = warning function  
Green LED = information function

### Activating the on-board computer:

In the power supply circuit was interrupted, the digital display will flash:



- press this key three times.

The display 0 will appear.

Put in actual time (but do not start with 0). Wait for display to "blink" once.



- press this key.

The on-board computer is now ready to operate.

**Input and information display, e.g. distance to destination**

DISTANCE

78 (km, miles)



Press the DIST function key.

Put in 78 as the distance in km or miles.















Wait for the actual time to appear.

The distance value (78 km/miles) is then memorized.



When the key is pressed, the remaining distance from the destination will be displayed for 8 seconds.



Information	INPUT		OUTPUT	Notes on INPUT and OUTPUT
	Function	Numeral	Wait for <b>actual time display</b> after each output or else an INPUT will be made	
Outside temperature	-	-		LED comes on above +3° C or 37° F. A gong sounds below this temperature. Display and flashing LED for 8 s. Risk of ice on road
Remaining distance to destination		km or miles to destination		Max. input 9999
Estimated trip arrival time		km or miles to destination		Time, without losing last average speed value.
Average trip speed	 	-		Average speed since SPEED/START input
Maximum speed warning		km/h or miles/h	-	Gong sounds and LED flashes when speed input is exceeded
Trip average fuel consumption	 	-		Trip average fuel consumption since MPG/START input If display flashes, speed is under 20 km/h or 13 miles/h
Average consumption warning		Above 10, first decimal place can be put in, e.g. 10.0 l/100 km = 235 MPG		Average consumption display can be displayed. If limit is exceeded, LED flashes for 8 s. If MPG/LOCK is pressed, automatic warning (flashing LED) will be displayed continuously if limit is exceeded.















TO CORRECT  
a numerical input,  
press CE + numeral

TO CANCEL  
a function input,  
press function + STOP

FOR CONTINUOUS  
DISPLAY of a function,  
press function + LOCK

TO CANCEL  
a continuous function  
display, press LOCK



Information	INPUT Wait for <b>actual time display</b> after each input		OUTPUT Wait for <b>actual time display</b> after each output, or else an INPUT will be made	Notes on INPUT and OUTPUT
	Function	Numeral		
Estimated maximum travel distance with remaining fuel	-	-		Display flashing = range under 15 km or 1 mile.
Exit distance		km or miles to exit		Gong sounds and LED flashes approx. 1 km/mile before exit, followed by automatic cancellation.
Time reminder		Real time		Gong sounds when time is up, LED flashes for app. 30 min, even with ignition at 0. <b>Can only be operated if car without parked car heater.</b>
Time switch for parked car heater (if equipped)		Real time		Runs the parked car heater for approx. 30 minutes; LED flashes. No time reminder possible.
Direct operation of parked car heater	 	-	-	Switches on parked car heater directly; LED flashes for approx. 30 minutes.
Anti-theft protection	  Input only possible with ignition key in position 1. To cancel input, move ignition key from 1 to 2 and back to 1	e.g. code 1088  (Never start with "0") LED comes on	Ignition key in position 1. Put in code; if correct, actual time will be displayed. Start the engine	Audible warning signal for 30 s = code input incorrect. If code has been forgotten, remove fuse for on-board computer. All memorized functions and numerical inputs will be erased.
Stopwatch- start		-	Intermediate time 	Stopwatch does not run if engine is stopped. LED comes on.
- stop		-	-	Display in 1/10 s; after 1 min in min/s; after 1 hour in h/min.
Real time - display	-	-		Real time display goes out when ignition key is at 0.



## Further information on the on-board computer

If the power supply to the on-board computer has been interrupted for any reason, four flashing dots are displayed. This means that all the functions and numerical data have been erased, and the computer must be re-activated by an actual time input.



Outside temperature display between  $-30^{\circ}\text{C}$  and  $50^{\circ}\text{C}$  or  $-22^{\circ}\text{F}$  and  $122^{\circ}\text{F}$ . The display begins to change 30 s after the journey has started. If the temperature drops below  $3^{\circ}\text{C}$  or  $37.5^{\circ}\text{F}$ , the gong sounds automatically, the LED flashes and the actual temperature is displayed for 8 s as a warning of possible ice on the road surface. This also applies if the ignition key is turned from 0 to 1 at an outside temperature below  $3^{\circ}\text{C}$  or  $37.5^{\circ}\text{F}$ . Further automatic warning follows if the outside temperature rises in the meantime to at least approx.  $6^{\circ}\text{C}$  or  $43^{\circ}\text{F}$  before dropping again.



The probable time of arrival is calculated from the input trip distance, the distance already covered, the most recent average speed calculation and actual time. If the car stops for longer than 30 s, these intervals are disregarded in the calculation. This output can only be obtained if the distance from the destination was put in before the trip started.



The SPEED key can be used to put in a speed limit which cannot be exceeded without causing the gong to sound. At the same time, the red LED flashes.

After this, the gong only sounds if the speed since the last warning signal was given, has dropped at least once by 8 km/h or 5 mph (at less than 75 km/h or 46 mph) or by 10 km/h or 6 mph (at more than 75 km/h or 46 mph) below the selected speed limit.

In addition, the average speed (based on the distance already covered) can be displayed by pressing the SPEED/START keys.



After the MPG/START keys have been pressed, the average fuel consumption in liters per 100 kilometers (l/100 km) or miles per gallon (mpg) is measured and can be displayed at any time by pressing the MPG key. To determine the average fuel consumption after refuelling, fill the tank and press the MPG/STOP and then the MPG/START keys, to erase the memory. Otherwise, the average fuel consumption will be measured for the entire distance.

At a speed below 20 km/h or 12 mph no display appears the first time the MPG/START keys are pressed; instead, four flashing dots are displayed.

In addition, a maximum average fuel consumption limit can be put in. Up to and including 9 l/100 km or 26.2 mpg the input can only be in complete liter or gallon units. From 10 l/100 km or 23.5 mpg on, the first decimal place must be added (e.g. 10.0).

If the maximum average fuel consumption input is exceeded, the average consumption is displaced and the LED flashes when the MPG key is pressed.



By pressing the RANGE key, the distance which can still be covered on the fuel remaining in the tank (assuming that the existing style of driving is maintained) can be displayed.

This calculation is based on the last average fuel consumption calculation and the amount of fuel in the tank. Changes in the range are shown in 1 km or 0.6 miles steps. Below a range of 15 km or 9 miles four dots flash. If fuel is added to the tank, the change in the amount of fuel is registered automatically and the range calculation modified accordingly.

**If the power supply is interrupted**, the system needs to be recalibrated to increase accuracy when measuring the contents of the fuel tank. This takes place whenever the reserve fuel limit is next reached, the low fuel level warning light must stay on for app. 2 km or 1.2 miles. Until this has occurred, the range will be calculated on the basis of the non-calibrated contents of the fuel tank.



If the EXIT key is pressed, followed by input of the distance to a highway exit, town center or other signposted point, a reminder signal (gong) will sound about 1 km or 0.6 miles before this point is reached; the green LED flashes for the remaining distance. In addition, the distance still to be covered to the chosen exit point can be displayed by pressing the EXIT key.





A time reminder or a time-switch period of not more than 30 minutes can be put in with this key. When the TIMER key is pressed, a zero (0) and a dot appear. Within the next 8 seconds, the desired reminder time or the time switch actuating time must be put in at the numerical keys. No times between 0.01 and 0.59 can be put in. The time put in can be displayed again before the 30-minute time-switch period has elapsed by pressing the TIMER key. When the timer input has been activated, the LED comes on; during the time-switch period, the LED flashes. At the end of the 30-minute switching period, the memory is automatically erased. If the switching action is to take place immediately after a switching time has been put in, press the TIMER/START keys within 8 seconds. Press the STOP key at any time to discontinue the direct switching mode.



If the DIST key has been pressed, a destination distance up to 9999 km (miles) away can be put in. The subsequent display then shows the distance remaining before the destination is reached.



The code put in must never start with 0. By pressing the CODE key and the input of a code number in ignition key position 1, it is possible to prevent the engine from starting. If the ignition key is turned from 1 to 2 and back again after the code input, the input is immediately erased. The immobilizing circuit is activated when the ignition key is pulled out. To start the en-

gine, turn the ignition key from 0 to 1. The green LED comes on and the display reads "0000". The correct code number must then be put in to cancel the immobilizing circuit, after which the actual time will be displayed and the LED will go out. Should the code number input prove to be incorrect, the horn will sound intermittently for 30 seconds after three attempts to start the engine.



The START key causes the stopwatch mode to begin running, with an accuracy of 1/10 second. The green LED comes on. Press the START key again for an intermediate time reading. The maximum period which can be timed with the stopwatch is 59 h, 50 min.

Other start inputs, for example MPG/START or SPEED/START, can be made while the stopwatch is running without either of the selected functions being interrupted in any way.

The display is in seconds and tenths of a second, switching after 1 minute to minutes and seconds, and after 1 hour to hours and minutes.



During inputs, the CE key can be pressed to cancel the input still visible on the display. Values already memorized remain unaffected.



The stopwatch is halted by pressing the STOP key, and the time reading will be displayed. Until the stopwatch is restarted, this reading can be displayed again as often as needed by pressing the STOP key.

To erase a function input completely: first press the function key, then the STOP key. The LED will go out.



It is not possible to put in a series of numerals beginning with 0, as this causes the input to be erased immediately and the display to revert to actual time.



If the LOCK key is pressed during a function display – except for CODE – this function

will be displayed continuously until LOCK is again pressed.

Whenever a display is held by pressing the LOCK key, only displays are possible, not inputs, apart from the stopwatch mode, which can still be selected. The LED comes on to show that the LOCK function is in use.



When the ignition key is at 0, the actual time can be displayed by pressing the TIME key. To adjust the actual time display in the "km" mode, press the TIME key several times until 0 appears at the right of the display. The new time setting must then be put in within 8 seconds. After this, wait for the display to "blink" once, and press the START key when the selected time is reached (for instance, by waiting for a radio time signal). If no input takes place, the previous actual time display will be retained.





In the "miles" operating mode, the TIME key is pressed three times, to obtain 0 on the display and cause the AM LED to light up. If the TIME key is not released after it has been pressed for the third time, the AM/PM LEDs begin to light up alternately at one-second intervals. The AM or PM indication showing when the key is released will be retained by the computer. In the following 8 seconds, the desired actual-time setting must be put in. Wait for it to "blink" once, then press the START key at the correct moment.