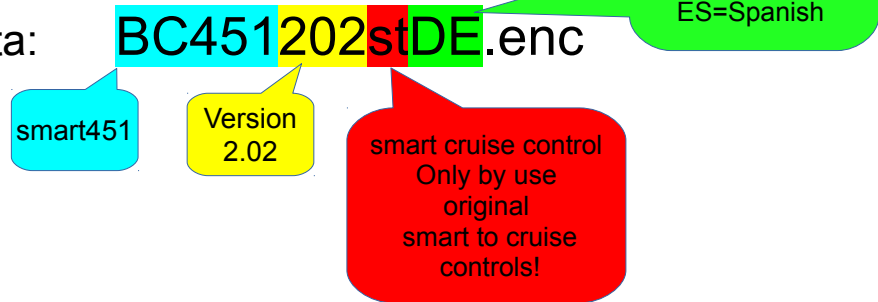


Versions Board computer smart 451

Naming update data:



Note:

After an update, the remainder distance computation can indicate wrong values for some minutes!
Statistical values can to be possibly wrongly and have to be deleted.

BC 451 Version 1.02

1. Speed of the rest distances calculation can be put individually. From 1 (fast) to 100 (slowly). Recommended value area 5 basic values 50th to = 25.
2. Raises consumption steady diesels, petrol +10%
3. Automatic recognition of the inside sensor (connection about distributor box) remotely. Now it is put about service programme.
4. Announcements in the Standby freely to or switchable.

→ PC set-up programme Version 1.01 is necessary !

BC 451 Version 1.03

1. Rest distance calculation eligible with or without trust (consumption = 0)
2. Rest distance calculation starting from Tankwarning 1 (5L) faster and with small dissolution selectable.
3. Travel time for statistics S and R more exactly.
4. Travel time or total time selectable for statistics R
5. Travel time/total time /Hold time selectable for statistics S
6. Consumption constant for Diesels corrects
7. If all announcement in the Standby out → no LCD lighting with depressing the key
8. Flash the outside temperature announcement as warning reference additionally possible.
9. Indicate the cruise control speed (from Version V2.4)
10. Time over Setup program adjustable.
11. Genuine per cent computation with consumption correction.
12. Various small optimizations.

→ PC set-up programme Version 1.02 is necessary !

BC 451 Version 1.04

1. Large data display on the 3rd data side possible.
2. With large announcement on the 3. Data side → selectable auxiliary value in the info. corner.
3. Decimal place of the tank announcement selectable. (only with liter)

→ PC set-up programme Version 1.03 is necessary !

BC 451 Version 1.05

1. Consumption while stationary (l/h) in the consumption statistics R and S is considered.
 2. Tank announcement new basic value for full (35L).
 3. Various small optimizations.
-

BC 451 Version 1.06

1. Small errors in the attitude menu (language) repaired
2. Selflearning tank value for the max. level (raw value)
3. Maximum value the LCD (100%Wert) adjustable.
4. Tank Max value automatically determine/out adjustably.

→ **PC set-up programme Version 1.04 is necessary !**

Absolutely consider after updates on V1.06!

- The storage location for the learning tank raw value must be set to a valid value!
- The maximum value for the LCD lighting to a value set!

Tank raw value:

1. With BC Setup 1,04 (with extras) the tank giver manually on 60 set and the value transferred.
(Page 13 and 14 of the documentation)
2. The automatic again switch on.

LCD Lighting:

1. The suitable value of the lighting LCD place with „light from“.
 2. Settings transfer.
-

BC 451 Version 1.07

1. Tank Max value is worth set automatically after the update on a valid. The manual attitude of the storage location for the tank raw value is not necessary any longer.

→ **PC set-up programme Version 1.04 is necessary !**

BC 451 Version 1.08

1. Individually eligible fonts for the issue positions.
2. Additional statistics T.
3. All statistics (R, S., T) with 4 eligible times.
4. Selectable data side in the case of ignition on.
5. Acceleration measurement.
6. Announcement values of the 3rd data side directly with the right key change.
7. Various optimisation.

→ **PC set-up programme Version 1.05 is necessary !**

Absolutely consider after updates on V1.08!

1. The topical Statisitk evaluates R and S. become invalid and must be cleared!
 2. All new settings check / put in the set-up programme and transfer it.
-

BC 451 Version 1.10

1. OBD Data announcement.
2. OBD error memory reading / extinguishing.
3. Adjusting of the smart background lighting in the 1st menu (cable necessary !).
4. A begun acceleration measurement can be finished again.
5. Printed form announcement OBD absolutely / relatively or externally eligible.
6. Servicing interval small and largely.
7. Selectable data on the page 3 (2.5s).
8. Adjustable gradient of the frequency exit of 1 hertz to 24 hertz / kmh.
9. New entry in the menu BC Light maximum value.
10. All data sides in the menu BC selectable.
11. Font issue of the water temperature.
12. Announcement values of cruise control MDC about CAN
13. Various small optimizations.

→ **PC set-up programme Version 1.06 is necessary !**

Absolutely consider after updates on V1.10!

The new values of water temperature issue and OBD after him updates put.
Use no old set-up programme!!!!!!

BC 451 Version 1.11

1. Workshop mode.
 2. Menu Cockpit light setting remotely.
-

BC 451 Version 1.12

1. Mistakes repaired time delay of the clock.
 2. Correct announcement of the oleograph measurement (Only with additional pressure tin).
-

BC 451 Version 1.13

1. Allocation of the doors for England (right steering wheel) selectable.
2. Errors output format with oil pressure repaired.
3. Errors with simultaneous edition info. field and side with clock, kmh, upm, volts, bar, oil temp, oil pressure, opttemp repaired.
4. Indicate to the interior temperature also on the data sides possible.
5. Free combination of consumption and distance units possible.

→ **PC set-up programme Version 1.07 is necessary !**

BC 451 Version 1.14

1. Graphic issue of the topical average consumption on the 3rd data side possibly.
2. Selflearning tank value on basic value place possibly (in the menu BC). Automatic inquiry of the tank giver's value in the system to and switchable. In the menu-Auto-new entry. Menu restructures.
3. Issue of the topical average consumption (basic value of rest distance calculation), in addition, on the 3rd data side on issue of the topical average consumption.
4. Announcement of the average consumption also on the data sides & info corner.
5. Announcement of the inside temperature (sensor necessary) also on the data sides & info corner.

→ **PC set-up programme Version 1.08 is necessary !**

[BC 451 Version 1.15](#)

1. Type-size of the topical consumption announcement (in the left LCD) can be changed.
2. At big water temperature announcement with degree symbol to 99 °
3. Italian version.
4. Input of the written choice for each of 8 positions in the also menu BC now possibly.
5. Big announcement of the inside temperature (Only with additional feeler) in the Standby.
6. Various optimisation.

→ **PC set-up programme Version 1.09 is necessary !**

[BC 451 Version 1.16](#)

1. Consumption announcement also in km / l.
2. Mistakes repaired in graphic issue on dataside 3.
3. Announcement of the numerical consumption value on graphic issue in all units.
4. Settings for enlarged comma place with consumption also works on l / km and mpg
5. Choice of all combinations of the unities also in the menu BC possibly.
6. Various optimisation.

→ **PC set-up programme Version 1.10 is necessary !**

[BC 451 Version 1.20](#)

1. Cruise control announcement for the original smart cruise control.
2. Speed announcement for cruise control also in mph possibly.

→ **PC set-up programme Version 1.10 is necessary !**

[BC 451 Version 1.21](#)

1. Spanish texts ESPANIA
2. Battery monitor (Only with set-up programme)
3. Mistakes repaired on beam issue for boost pressure by external sensor
4. Eligible design of the graphic beams for speed, boost pressure, oil temperature, oleograph (Only with set-up programme)
5. Eligible frame of the statistics sides (Only with set-up programme)
6. Eligible design of the beams for tank contents and water temperature

→ **PC set-up programme Version 1.11 is necessary !**

BC 451 Version 1.22 from 5.9.11

1. Battery monitor measurement optimises (short start impulses are also evaluated).
2. Battery monitor announcement can be finished with the right key. Besides, the last data side is preserved.
3. Announcement of acceleration measurement also with maximum speed and g value possibly.
4. Beams: end mark by max value.
5. Beams: Peak Hold (mark or value) possible. Design of the mark freely eligible.
6. Beams: Scale possibly.
7. Announcement of the more topically measuring value instead of „Peak sweetly“ in the beam possibly.
8. Battery error announcement with over voltage (regulator defective).
9. Battery error announcement with voltage in the symbol
10. Left key can be used with OBD also switch to the next PID.
11. Interrupt (stop) to the "scan function" (automatic side switching of the data sides) This can be interrupted with short pressing of the right key. The automatic side switching is begun by renewed pressing again. The "scan function" must be activated.
12. OBD PID: 10\$ of 23\$ 24\$ issue mistakes corrects
13. Announcement of the original smart gear recommendation

→ **PC set-up programme Version 1.12 is necessary !**

BC 451 Version 1.23

1. Issue the switch tip largely (like original announcement) or small (way announcement is preserved) eligible.
2. New beam issue (Form13 - bubble) like smart 450, for tank contents and temperature.
3. PID24 new calculation and logic.
4. Tank contents eligible 33 Litre or 35Litre)
5. Set-up: Input tank contents eligible.
6. Removes small bugs, programme optimised.

→ **PC set-up programme Version 1.13 is necessary !**

BC 451 Version 1.24

1. Battery Monitor: Management in the menu BC possibly.
2. Battery monitor: Additional mode (remains visible to keystroke)

→ **PC set-up programme Version 1.14 is necessary !**

BC 451 Version 1.30

1. Graphic battery monitor on the data side 3 instead of big oleograph issue.
2. BC Data Logger

→ **PC set-up programme Version 1.15 is necessary !**

After the update on V1.30 the settings with the small info field as well as the start monitor check if necessary correct!

The statistics values must be cleared.

BC 451 Version 1.40

1. Announcement improves with mpg.
2. Trim area of the clock enlarged.
3. Announcement of consumption correction improves in the running dry (L/h)
4. New vehicle type (petrol vehicles without turbocharger)
5. Issue of another consumption value (from R, S., t statistics or average) instead of the topical consumption possibly.
6. Prepared for Bluetooth module.

→ **PC set-up programme Version 1.20 is necessary !**

Before the update notice the trimm value of the clock. This after the update put.
After the update on V1.40 the settings of the correct car types carry out.

BC 451 Version 1.41

1. Removes small bugs in the voltage start monitor.
2. Remove bug in battery Monitor (Dataside 3)
3. Correction (fine comparison) for voltage announcement possibly.

BC 451 Version 1.42

1. Removes small bug in the Peak Hold/RPM announcement.

→ **PC set-up programme Version 1.21/1.22 is necessary !**

After the update on V1.41/V1.42 the correction value of the voltage announcement
(Extra-> Voltage correction) on 0!

BC 451 Version 2.00

1. Errors with consumption correction while stopping car
2. Consumption basic values of the gasoline-driven car raised about 50% (read tip)

BC 451 Version 2.01

1. Improved calculation of the interior temperature indication.
2. Selectable in the LCD menu. Minimum LCD lighting when ignition off.

BC 451 Version 2.02

1. Improved calculation of the interior temperature indication during standby

→ **PC set-up programme Version 1.22 is necessary !**

BC 451 Version 2.10

1. engine starting counter in addition

→ **PC set-up programme Version 1.22 is necessary !**

Update BC451

1. USB Dongle to PC and BC451 attach.
2. BC read out the existing attitudes to take this!
3. Start UPDATE.
4. After updates, **make additional attitudes.**
5. Transfer the new values to the BC.
6. Finished.

