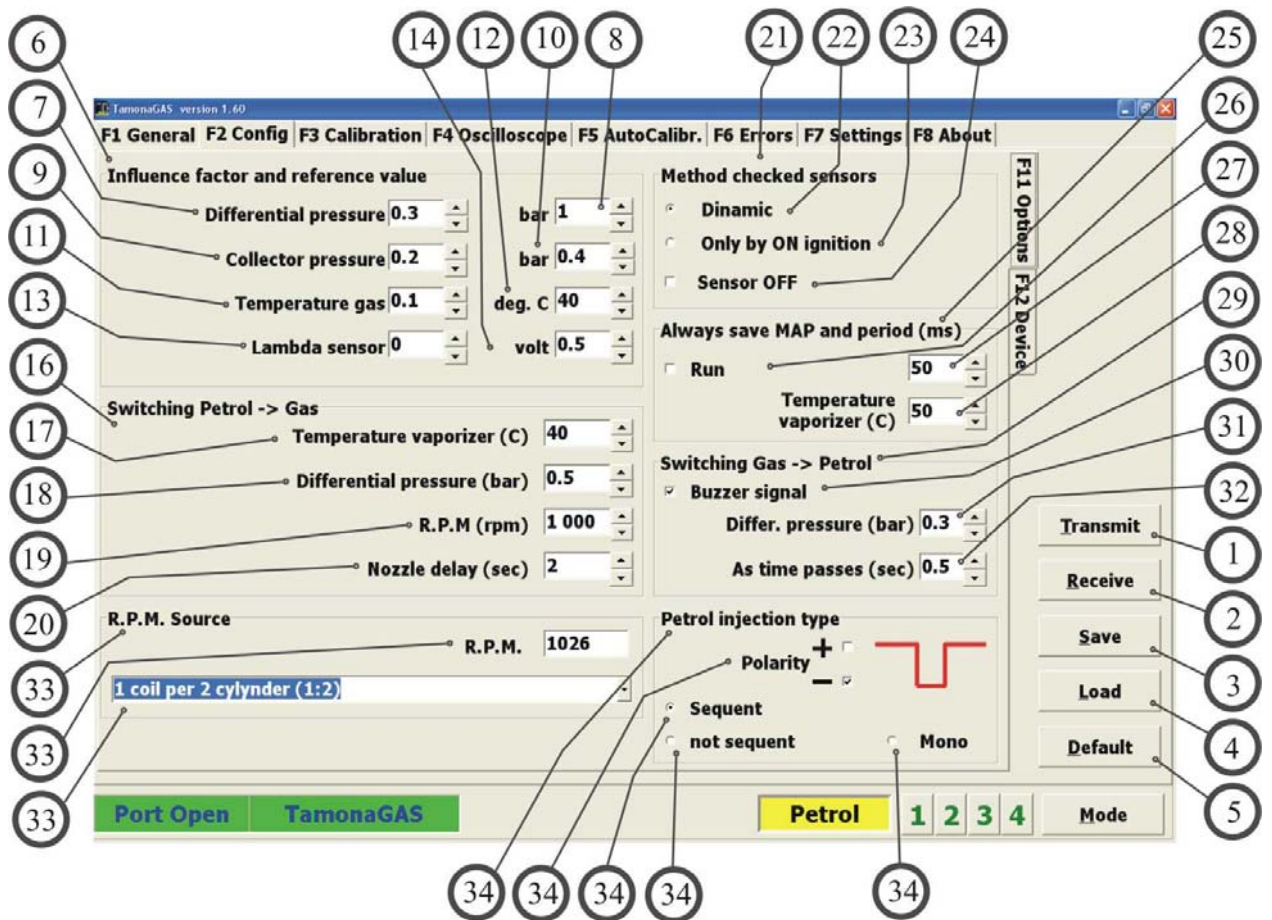


F2. Configuration. F11. Options. Overview



Control buttons for configuration data (F2) and calibration (F3)

1. Data transmitting to ProGAS (Transmit -“T”).
2. Data receiving from ProGAS (Receive - “R”).
3. Data saving into file ([file name].CFG) (Save -“S”).
4. Data loading from file ([file name].CFG) (Load - “L”).
5. Loading of factory’s settings (Default - “D”).

6. Block of gas mixture correction factors.

7. Influence factor to gas contents relatively to reference differential pressure.
8. Reference differential pressure.
9. Influence factor to gas contents relatively to reference differential pressure in manifold.
Riching at accelerating pedal pressing and pooring at pedal releasing.
10. Reference differential pressure in manifold.
11. Influence factor to gas contents relatively to reference gas temperature.
12. Reference gas temperature.
13. Influence factor to gas contents relatively to threshold lambda sensor voltage.
14. Threshold lambda sensor voltage.
15. Graphical image of threshold lambda sensor voltage.

16. Block of parametrs of switching petrol-gas.

17. Vaporizer temperature at which engine switches from petrol to gas and pp.18 and 19 conditions complete.
18. Differential gas pressure at which engine switches from petrol to gas and pp.17 and 19 conditions complete.
19. Engine round per minute at which engine switches from petrol to gas and pp.17 and 18 conditions complete.
20. Gas nozzles interval (if 0 sec. – all nozzles switched on simultaneously).

21. Block of sensors adjusting.

- 22. Check sensors permanently.
- 23. Check sensors only at starting.
- 24. Switching off all sensors.

25. Block of parameters recording card of petrol nozzles duration.

- 26. Recording card is ON.
- 27. Time (ms) for collecting data of petrol nozzles impulses duration.
- 28. Temperature (°C) at which recording card is active.

29. Block of parameters of emergency switching gas to petrol.

- 30. Switch on buzzer signal in remote control at emergency switching gas to petrol (if p.31 is complete).
- 31. Differential pressure threshold (bar) less which engine switches from gas to petrol after expire of time by p.32.
- 32. Time (sec.) after expire which engine switches from gas to petrol if p.31 complete.
- 33. Block of adjusting input impulses division factor.
- 34. Extra RPM indicator for visual monitoring of correct input impulses division factor (RPM).
- 35. Input impulses division factor. To be selected for comparison between real round per minute and indicator figure (F1.15). When division factor is correct car tachometer indication (F11.34) coincides with indicator figure (F1.15).

36. Block of adjusting petrol injection type parameters.

- 37. Option of petrol nozzles polarity.
- 38. Phased injection. For engines with distributed, phased and coupled-parallel injection of petrol to manifold.
- 39. Non-phased injection. For engines with distributed but simultaneous injection of petrol to manifold.
- 40. "Monoinjection" mode. For engines with monoinjection of petrol to manifold.

F2. Configuration. F11. Options. Detailed description

Attention! If in bookmark “Settings” (F7) option “Transmit data immediately” (F7.29) is off it is necessary to push button “Transmit” or button “T” (Transmit) after data configuration changes, in order to save data in ProGas.

Control buttons

- “Transmit” - “T” (F11.1)

Transmits data of configuration (F2, i.e. F11 and F12) to ProGAS. When option on “Data CFG and CLB together” (F7.7) in bookmark “Settings” is ON, calibration data are transmitted (F3), too.

- “Receive” - “R” (F11.2)

Receives from ProGAS data of configuration (F2, i.e. F11 and F12). When option on “Data CFG and CLB together” (F7.7) in bookmark “Settings” is ON, calibration data are received (F3), too.

- “Save” (F11.3)

Records configuration data (F2, i.e. F11 and F12) into .CFG file. When option on “Data CFG and CLB together” (F7.7) in bookmark “Settings” is ON, calibration data are received (F3), too. File name in active option on bookmark “Settings” “Show dialogs Save/Load” (F7.5) is shown in standard Windows dialog window and file is saved under name that is set in the option in bookmark “Settings” “File name at programme loading” (F7.9) if option is OFF. Standard Windows dialog window does not appear.

- “Load” - “L” (F11.4)

Loads configuration data (F2, i.e. F11 and F12) from .CFG file. If option “Data CFG and CLB together” (F7.7), on bookmark “Settings”, is ON, calibration data (F3) are loaded, too. File name in active option on bookmark “Settings” “Show dialogs Save/Load” (F7.5) is indicated in standard Windows dialog window and file is saved under name that is set in the option in bookmark “Settings” “File name at program loading” (F7.9) if option is OFF. Standard Windows dialog window does not appear.

- “Factory’s settings” (Default) - “D” (F11.5)

Sets default settings for configuration data (F2, i.e. F11 and F12).

Adjusting of gas mixture factors correction (F11.6)

Real data of the reference values for any car (F11.8, F11.10, F11.12, F11.14) to be set only for autocalibration completing (F5). Zero values of correction factors excludes them from program functioning. Correction factors and reference values participate in correction of gas nozzles impulses duration only at switched-off option F11.24, at proper function of temperature and pressure sensors and current values of sensors do not coincide with reference values.

Influence factors :

- “Differential pressure” (F11.7) (Default - 0,3). Correction of gas mixture is carried out depending on real differential pressure regarding reference value (F11.8). The more differential pressure the less gas impulses duration. Influence rate depends on set value (F11.7). It is necessary for gas mixture correction with unstable performance of gas reducer.
- “Pressure in manifold” (F11.9). (Default - 0,2). Correction of gas mixture is carried out depending on changes of real pressure in manifold regarding reference value (F11.10). The more pressure in manifold the more gas impulses duration. Influence rate depends on set value (F11.9). It is used for extra reaching of gas mixture at accelerating and pooring for accelerator pedal releasing.
- “Gas temperature” (F11.11). (Default - 0,1). Correction of gas mixture is carried out depending on changes real gas temperature regarding reference value (F11.12). The more gas temperature the more gas impulses duration. Influence rate depends on set value (F11.11). It is used for stable engine performance if air temperature and performance modes are changed.

- “Lambda sensor” (F11.13). (Default - 0). Additional correction of gas mixture is carried out depending on lambda sensor signal regarding reference value (F11.14). Sometimes it lets to increase speed of fine gas mixture adjusting. Too large value (F11.13) could cause unstable working on idling.

Adjusting of parameters of switching from petrol to gas (F11.16)

ProGas system switches from petrol to gas in “Automatic” mode if all conditions are completed:

- “Vaporizer temperature” (F11.17) (Default - 40 °C).

It participates only if option (F11.24) is OFF and temperature sensors function properly.

- “Differential pressure (F11.18) (Default - 0.5 bar).

It participates only if option (F11.24) is OFF and pressure sensors function properly.

- “Engine rounds per minute (F11.19) (Default - 1000 rpm).

- “Nozzles delay (F11.20) (Default - 2 sec).

Interval of gas nozzles switching on at petrol to gas switching. If this value is 0 the nozzles switches at petrol- to- gas switching simultaneously.

Adjusting of sensors checking way (F11.21)

- “Permanently” (F11.22) (Factory’s settings).

Sensors are checked permanently. If sensors failed TamonaGAS program excludes sensors data and influence factors to correction of gas nozzles impulses duration. At the same time the programme checks ability for work and puts data with full correction if the sensors work properly.

- “At ignition on” (F11.23).

Sensors are checked only at ignition

- “Sensors off” (F11.24).

All sensors are off. It is used when any sensor fails (bookmark “Errors “,F6) and there are no sensor for replacement. The car could be used temporarily. Correction of gas nozzles duration is strictly by diagram in bookmark “Calibration” (F3).

Adjusting of parameters for card recording of petrol nozzles (F11.25)

- “Switch on” (F11.26).

It is advised to switch on when adjusting car to check proper calibration. It is advised card recording of petrol nozzles to switch off when car is already in use.

- “Time of collecting data of petrol nozzles impulses duration “ (F11.27).

If for defined time petrol nozzles impulses duration is constant, there is duration data recording into memory.

- “Vaporizer temperature” (F11.28).

Temperature (°C) at which card recording mode becomes active.

Emergency switching from gas to petrol (F11.29)

- “Remote buzzer signal “ (F11.30) (Default).

Buzzer that is built-in remote control emits intermittend signal when ProGAS system switches from gas to petrol emergently. To stop emitting is possible by pushing the button of the remote control.

Emergency switching from gas to petrol is carried out in “GAS” mode if differential pressure is less than in “Differential pressure “ (F11.31) (Default 0.3 bar) after expiring time “Expiring time” (F11.32) (Default 0.5 sec.)

Impulse source adjusting (F11.33)

Setting input impulses division factor. It is selected by comparing real rounds per minute and tachometer indicator:

- Rev counter (1:1);
- Dual impulse (1:0,5);
- 1 coil per 2 cylinder (1:2);
- 1 coil per 1 cylinder (1:4).

Petrol injection type adjusting (F11.36)

- “Polarity” (F11.37)

Main wire +12V of petrol nozzles - negative impulse “-“

Main wire “ground “ of petrol nozzles – positive impulse “+”

- “Phased injection” (F11.38)

Gas nozzles open simultaneously with petrol nozzles, in this mode. It is used for engines with distributed, phased and coupled-parallel injection of petrol to manifold.

- “Non-phased injection (F11.39)

Gas nozzles open simultaneously with petrol nozzles, in this mode. It is used for engines with distributed but phased petrol injection to manifold. The signal of petrol nozzle opening is transmitted to N1 input of ProGas system.

- Monoinjection mode (F11.40)

In this mode, gas nozzles open simultaneously with the petrol nozzle opening. It is applicable for engines with monoinjection engine. The signal of petrol nozzle opening is transmitted to N1 input of ProGas system.