

Individual project Program



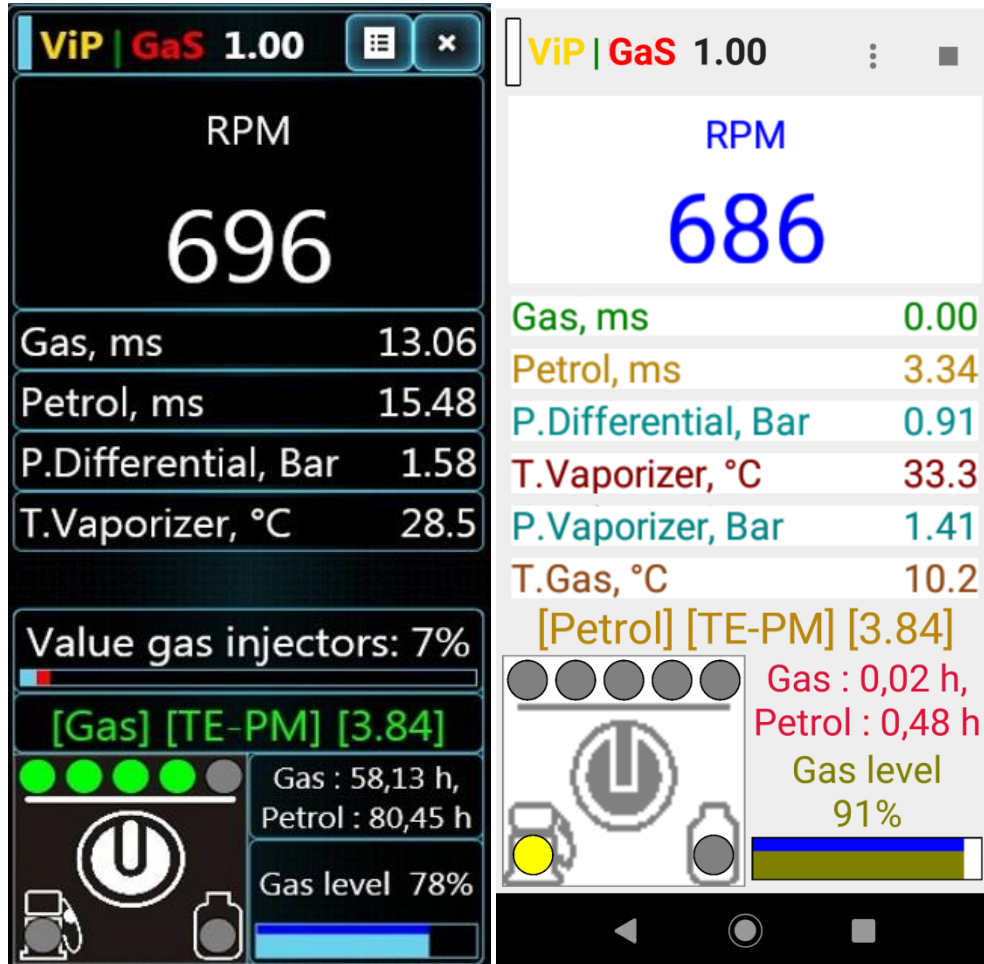
For users of systems

TE-PM, TE-PS, TE-SL, TEstream 4,
TEstream 6, TEstream 8, TEstreamOBD
4, TEstreamOBD 6, TEstreamOBD 8.

Alternative remote control in the phone

ViPGaS program description

The program is intended for users of the 4th generation automotive gas equipment systems developed by TEGAS. The program supports the following systems: TE-PM, TE-PS, TE-SL, TEstream 4, TEstream 6, TEstream 8, TEstreamOBD 4, TEstreamOBD 6, TEstreamOBD 8. The program is an alternative to control panels of the above listed systems with more extensive display and control capabilities. It communicates with systems via Bluetooth.



The program has the ability to display on screen all the values of the main data, with the ability to customize, increase (long press), which data should be shown, as well as the main events that occur in the systems, with the analysis of parameters. The program supports 3 application interface languages and 3 interface display styles and contains information about the program itself and contact information for the manufacturer TEGAS of supported devices. The events of the system include error messages, conditions and moment of switching system from petrol to gas, conditions, time and reasons for the reverse switching from gas to petrol, additional indication of the level of gas in the tank, information about the time the car runs on petrol and gas separately, information about the system itself (name, version), indication of the operating modes of the system, data on the loading of gas injectors, the state and dynamics of cartogram data collection and automatic adaptation of dual independent correction (DIC), and work and change trim factors of DIC. Most events are accompanied by text and voice messages that have their own **on** and **off** settings.

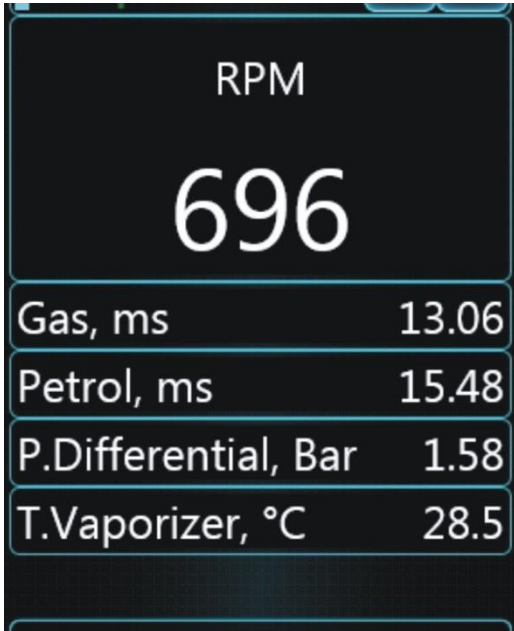
The main areas. Headline. From left to right.



1. Connection indicator.
2. Name and version of the program.
3. Button to show the menu and settings.
4. Button to close the program

Indication area of main parameters with scrolling option.

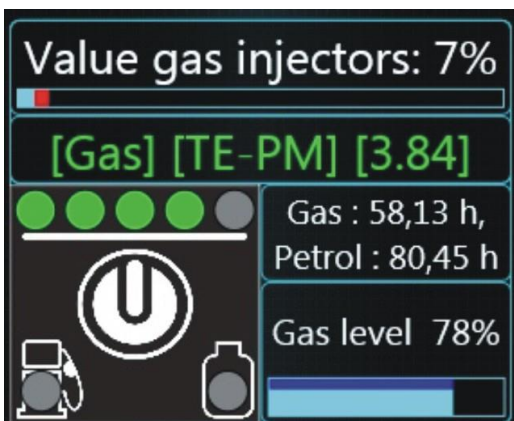
General parameters:



1. RPM
2. Vaporizer temperature
3. Gas temperature.
4. Temperature_ECU
5. Vaporizer pressure
6. Vacuum
7. Differential pressure
8. Battery voltage
9. Lambda sensor
10. Petrol injection
11. Gas injection
12. Idle run DIC factor.
13. Power DIC factor.

Displays the values of the general data. The user can specify which parameters and in which form to display them. To change the type of the displayed parameter or to add or remove one or another parameter, you must perform a long press of the screen and then select a parameter or action from the proposed menu

Control zone, messages and additional indication.



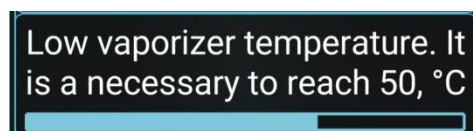
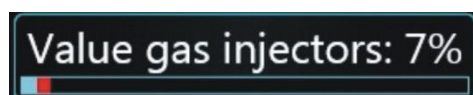
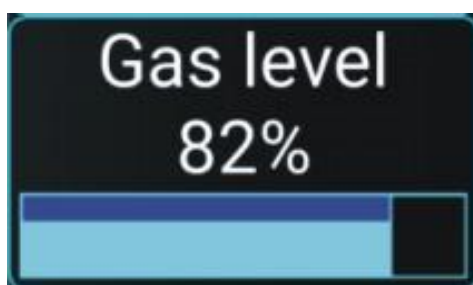
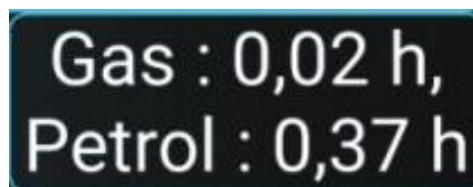
- Remote control
- ECU messages
- ECU operation time
- Gas sensor level
- Load of gas injectors
- Indicator of DIC

Connection settings

1. Auto connect after start program. After the program is loaded, the program connects to the system.
2. Run in the background after disconnecting. After a break in communication with the system, the program goes into sleep mode with a periodic interrogation of the system for connectivity.
3. Delay (ms). Depending on the speed of the device used for stable communication with the system, it may be necessary to adjust the delay value.
4. Bluetooth. The last connected bluetooth device and the choice of another already paired bluetooth device.
5. Scan. Scan new bluetooth devices with further pairing of bluetooth and device.

Setting up indications and messages. Remote Control. The program has the ability to change the size of the graphic control panel, its position, the switching mode, after periodically pressing the button on the control panel, as well as setting the sensitivity mode of the gas level indication in the tank.

Setting up indications and messages. Messages. The option “near remote control” means that the displayed information will be located on the left or right of the control panel.



1. ECU messages. Shows various data on the state of the values of the basic parameters in the dynamics, and in the absence of such information, data on the connected system and the firmware (system name, version of the firmware, current operation mode).

2. ECU operation time. Displays information about the time when the car was on petrol and gas separately.

3. Gas sensor level. Additional indication of the level of gas in the tank in percent. The main scale is displayed smoothly, taking into account the level of sensitivity, set in the settings, and the secondary shows the instant state of the parameters of the gas level sensor in the cylinder.

4. Load of gas injectors. Displays real load information in terms of performance in percents with fixing maximum values.

5. Indicator of DIC. Shows the activity of dual independent correction (DIC) modes, compliance or non-compliance with the requirements of the DIC modes and the dynamics of cartogram data collection on petrol and gas separately.

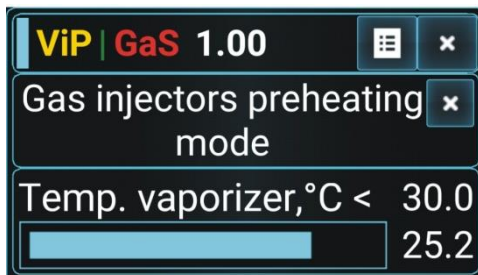


Indicator modes of DIC (at idle and on power). RPM and petrol injection match to idling mode, but the vacuum value do not. The white indicator shows the location in the zone of values of a certain parameter.

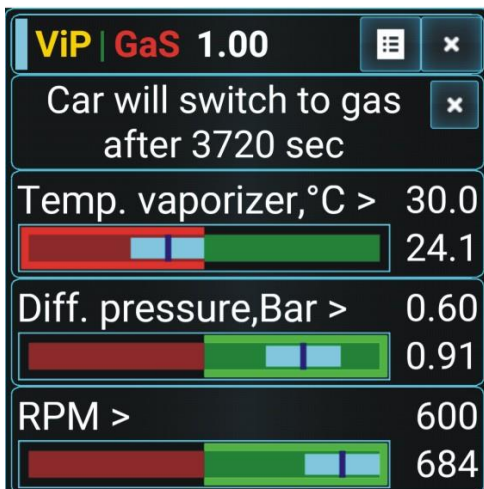


The indicator of cartogram collection shows the presence or absence of cartogram points, as well as the work of auto-adaptation in dynamics.

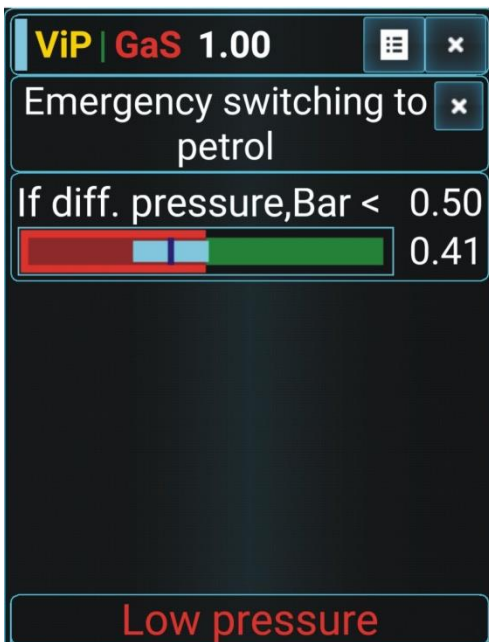
Настройка событий.



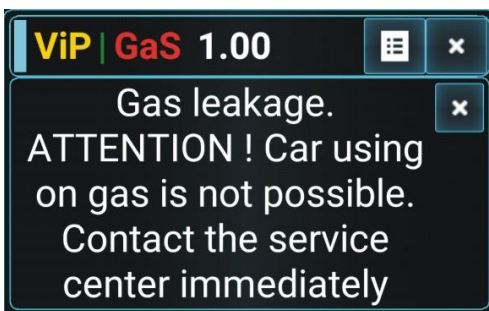
1. Preheating gas injectors. This mode is activated if the gas temperature is less than the one set in the system, the default is 5 ° C, and only in the automatic operating mode, while system waits for switching to gas. Graphical and digital indication dynamically shows the current and desired temperature and shutdown moment of this mode.



2. Switching from petrol to gas. In graphical and digital form shows 3 necessary conditions, the implementation of which will allow the system to switch to gas. To switch to gas, it is necessary that RPM exceeds the set (default 600), the differential pressure (pressure difference in the vaporizer and vacuum) exceeds the set (default 0.6 bar) and the temperature of the vaporizer is higher than the set (default 30 ° C) . If the current temperature is lower than the required one, then the program calculates and displays the data of the estimated time before switching to gas.



3. To petrol by high pressure. In graphical and digital form shows the reason for the switching from gas to petrol.
4. To petrol by low pressure. In graphical and digital form shows the reason for the switching from gas to petrol.
5. To petrol by low temperature. In graphical and digital form shows the reason for the switching from gas to petrol.



6. Gas leakage. In case of this error, the program warning with a voice (if the option is enabled) and a text message about the impossibility of operating the vehicle on gas.

Signals and sounds. The program provides a possibility of turning off all signals and sounds, as well as personal customization.

Basic device requirements

1. Operating system - Android 6 and above.
2. The amount of RAM - 2 GB or more.
3. Bluetooth adapter of company TEGAS - port speed 9600 baud.

You can buy the program here

<https://play.google.com/store/apps/details?id=com.ViPGaS.ViPGaS>