



GuardMagic VF1-VF2 Programming Tool (GM2.037)

User Manual

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1. INTRODUCTION

"**GuardMagic VF1-VF2 programming tool**" is the special technological complete set and intended for customer programming and change the setting of **GuardMagic VF1** and **GuardMagic VF2 modules** by Personal Computer.

In additional "**GuardMagic DLLS-DLLE programming tool**" utility allows to carry out fuel tank calibration procedure.

Fuel tank calibration procedure is carried by Personal Computer (Notebook).



2. PACKAGES

1.1 STANDARD PACKAGE

- AC/DC (220V/12V) power adapter with cable - 1 pc.
- Connection cable: VF module – PC (GM4.013) - 1 pc
- "GuardMagic VF1-VF2 programming tool" User Guide -1 book
- CD disk with manuals and software (GM9.211-102) -1 CD

1.2 OPTIONAL (order in additional)

- USB-Com adapter
(for connection VF1, VF2 modules to USB port in PC)

1.3 PACKAGE

The complete set is packed into a box from a corrugated cardboard

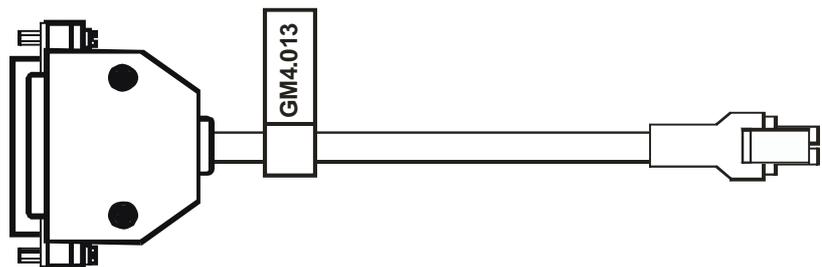
3. OVERVIEW OF MAIN COMPONENTS

AC/DC (220V/12V) power adapter with cable



Connection cable VF1-VF2 modules – PC (GM4.013)

(for connection to: GuardMagic VF1 and VF2 modules to PC by RS-232 communication interface)



CD disk
with manuals and software

CD disk contents:

- VF1-VF2 programming software;
- “GuardMagic VF1-VF2 programming tool” User Manual

4. SYSTEM REQUIREMENTS

System requirements to the PC:

- MS Windows XP, MS Windows Vista, MS Windows 7;
- Intel Pentium IV 600 or above (or AMD analogue);
- Main memory 256MB or above;
- 10 free space on a hard disk;
- Mouse and keyboard;
- RS-232 port (or USB port*);
- Video adapter and color monitor with the resolution not less than 800 x 600;
- CD or DVD ROM.

Note:

If your PC has only USB interface in additional will be need to use standard USB-Com adapter.

5. NECESSARY INFORMATION FOR MODULE PROGRAMMING

5.1. NECESSARY INFORMATION FROM YOUR LOCAL GSM PROVIDER

Before carrying out of the module programming, it is necessary to get information from your GSM operator:

parameters of GPRS at yours GSM the provider, namely:

- **access point** name/APN - APN server of yours GSM provider;
- **name (Login)*** – user name for access to a server of yours GSM the provider;
- **password*** – password for access to the server of yours GSM the provider;

* - often GSM provider has not (and don't give) Name and Password to access to its GPRS server.

This information will be entering in module during programming procedure.

5.2. NECESSARY INFORMATION FROM YOUR MONITORING STATION

For the module connection to monitoring station you have to get data from monitoring station (monitoring software), namely:

- **IP address** of monitoring station (server IP address);
- **port number** of monitoring station server.

If monitoring station (monitoring software) has an additional module name in system you have to get this information.

You also have to inform monitoring station about type of module and module factory number.

This information will be entering in module during programming procedure.

5.3. NECESSARY INFORMATION TO YOUR MONITORING STATION

For connection module to monitoring station (monitoring software) also will be needed to enter your module (information about your module) in to monitoring software.

This base information is:

- type of module (code of module type),
- factory number of your module.

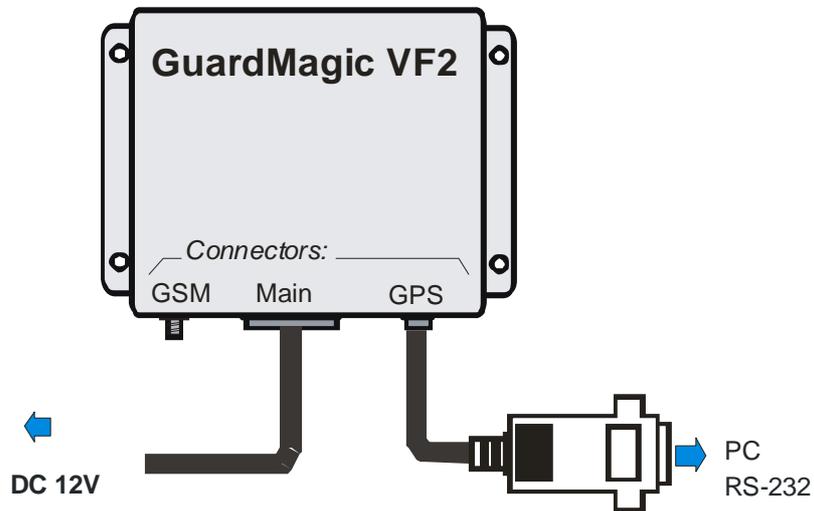
5.4. ADDITIONAL NAME

GuardMagic VF modules also support so named “additional module name” in system. If the monitoring station (or monitoring software) supports this function, “additional module name” can be programming in module and necessary has be taken to monitoring station (entering in monitoring software).

6. MODULE CONNECTION

6.1. DIRECTLY CONNECTION TO PC

Diagram show connection structure to PC that has RS-232 communication interface



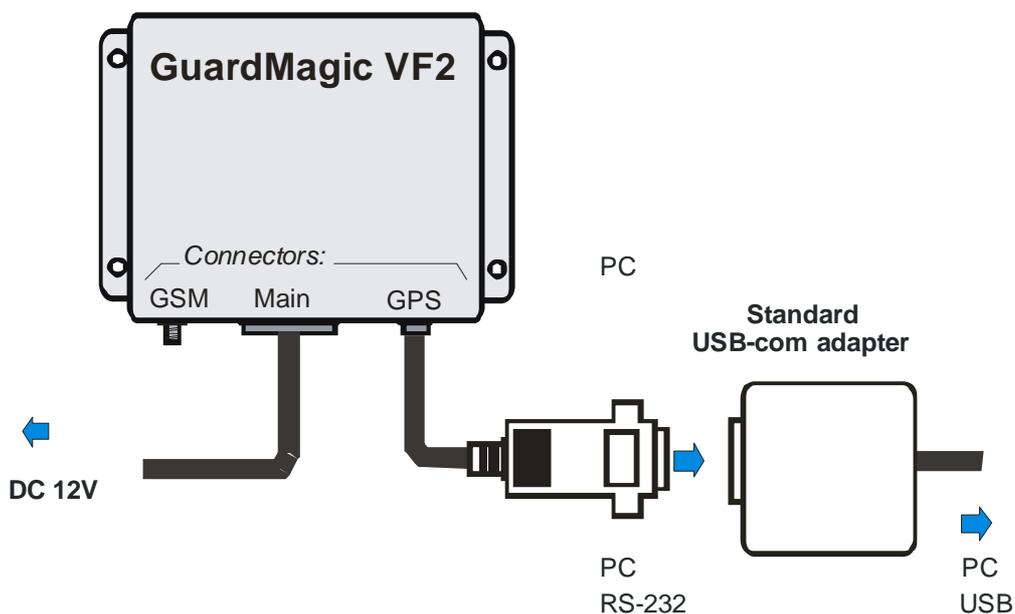
Connection order:

- Connect module **GuardMagic VF** to serial port of personal computer by the special connection cable (GM4.013 - connection cable PC-GuardMagic VF);
- Connect the cable of AC/DC power adapter (from complete set) to 4 pin connector on GuardMagic VB;
- Connect power adapter to AC 220 V.

6.2. CONNECTION TO PC BY USB-COM ADAPTER

If your PC has not RS-232 communication interface will be need to use additional standard USB-Com adapter for connection to USB interface.

Diagram show connection structure to PC that by USB communication interface



7. PROGRAM OVERVIEW

7.1. START THE PROGRAM

Copy program "GM VF programmer" from CD to hard disk of yours PC.
 Start the program "GM VF programmer" (VF-programmer.exe).
 After start the program on the screen will open the basic form, shown on figure.

- | | |
|--|---|
| <ul style="list-style-type: none"> 1. - Unit Data 2. - Unit Setting 3. - Connection Setting 4. - Data recording 5. - Mode 6. - Activated Records 7. - Control buttons | <p>Module main information:
 Module name and module factory number
 Additional setting of module
 Setting module connection parameters for GPRS connection and connection to monitoring server
 Setting the periodicity of data fixing (data recording)
 Setting the module operation mode
 Setting of additional information records (information data)
 Buttons for operation with software</p> |
|--|---|

7.2. UNIT DATA

Show the main information about module (Only Read):

NAME	FIELD DESCRIPTION
Unit type	Module name and module Firmware version
Unit SN	Module factory number

7.3. UNIT SETTINGS

Additional setting of module (Read/Write):

NAME	FIELD DESCRIPTION
Unit Name	GuardMagic VF unit additional name in system. Use like additional password. Enter / Change. Not necessarily, depend of system or monitoring software
Baud Rate GPS	Baud Rate with "GPS Antenna-Receiver". Can be 4800 or 9600. Depend of GPS antenna Baud Rate.
Engine Blocking Status	Service. Show status of Engine Blocking output (Lock/Unlock). Recommend unlock it.

7.4. CONNECTION SETTING

Setting module connection parameters for GPRS connection and connection to monitoring server (Read/Write):

NAME	FIELD DESCRIPTION	NOTE
APN	access point name - APN server of yours GSM provider;	Given by GSM provider; Necessary field
User Name *	GPRS User Name - user name for access to a server of your GSM the provider	Given by GSM provider; Necessary field
Password *	password for access to the server of your GSM the provider;	Given by GSM provider;
Host IP	IP address of monitoring station (server IP address);	Given by monitoring station (monitoring software); Necessary field
Host Port	port number of Main monitoring station server.	Given by monitoring station (monitoring software); Necessary field

* - often GSM provider has not (and don't give) Name and Password to access to its GPRS server.

7.5. DATA RECORDING

Setting the periodicity of data fixing (data recording)

NAME	FIELD DESCRIPTION	NOTE
Data fixing	Periodicity the data fixing (trip fixing), when vehicle is in moving (Ignition key in "On" position)	Select one from list Recommend periodicty: 15 ...30 sec
Active Standby	Periodicity the data fixing , when vehicle is parking (Ignition key in "Off" position)	Select one from list

7.6. MODE

Setting the module operation mode.

NAME	FIELD DESCRIPTION	NOTE
Transport	Mode for vehicle etc. (moving tehcnics and moving machinery)	Select one
Special Machinery	Mode for slow moving or not moving machinery (for example like: crane, doozer etc.)	
Adaptive speed	Activate adaptive data fixing by speed change.	On-Off

7.7. ACTIVATED RECORD

Setting (activated) of additional information records (information data)

NAME	FIELD DESCRIPTION	NOTE
Analog Fuel	"analog fuel" fixing and transmitting (fuel level sensor with analog output)	Select one
Digital Fuel	"digital fuel" fixing and transmitting (digital fuel level sensor). Also activate the necessary tanks	
FSt code	fixing and transmitting temperature information from digital fuel level sensors	
Service record	Activate transmittion additional information about vehicel movement	Acceleration-deceleration

7.8. CONTROL BUTTONS

Operation with software is carried out by control buttons



- | | | |
|---|-----------|--|
| 1 | Get Log | Service button.
(Allow to receive service log of module status) |
| 2 | 4800 | Communication speed with module
Select the necessary communication speed with module |
| 3 | COM | Select with necessary communication com port
(Number of RS-232 port to which module is connected) |
| 4 | Read Data | Read module setting |
| 5 | Save Data | Write new module setting |

8. STARTING OPERATION WITH SOFTWARE

After start the program it is necessary to choose COM PORT, select communication speed and to press button "Read Data".

After pressing the button "Read Data" will open "Base Setting" and will appear the information like this:



In the “Unit Data” will be information about GuardMagic VF module.

Note:

1. At the first reading the configuration of GuardMagic VF in some fields can appear the “ZERO” or “FFFF” information
 2. Record interval can be mark like “Read Only”.
- It will be necessary to change all “record intervals” to the “correct” record interval.
The correct Record Intervals select from the list of record interval

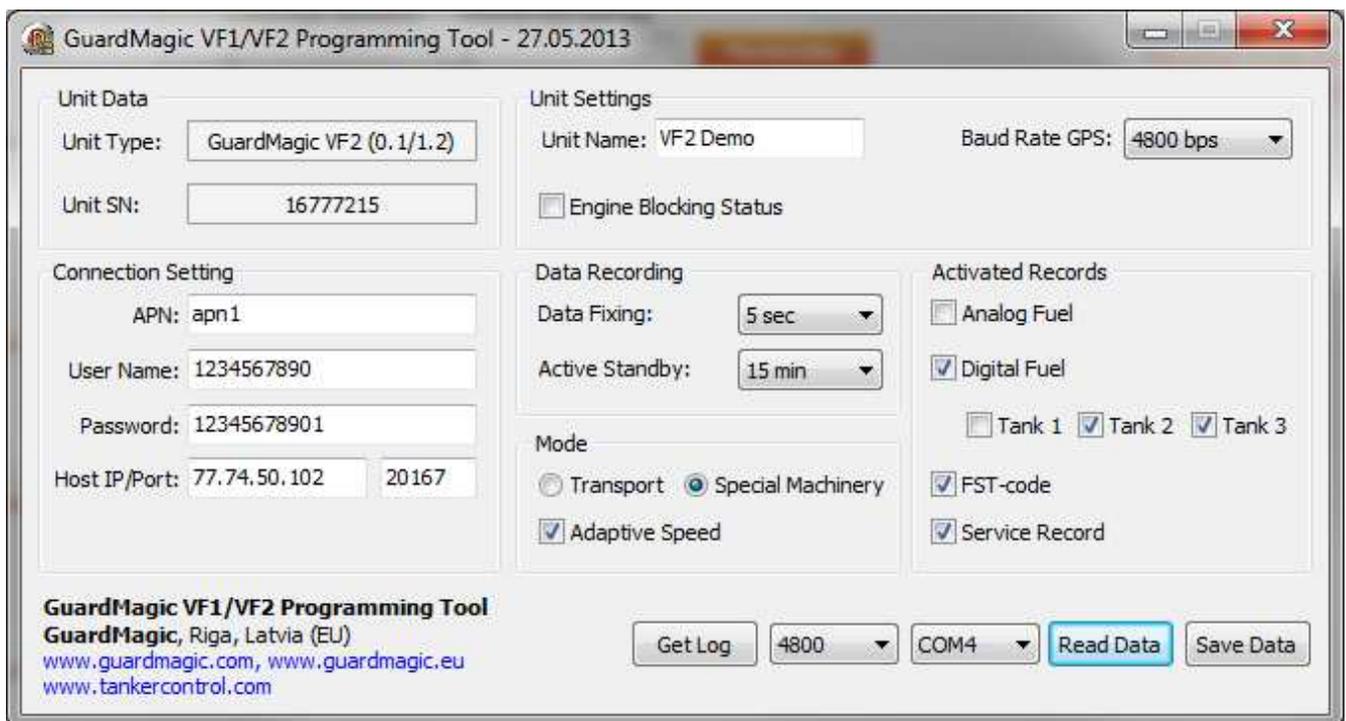
9. PROGRAMMING PROCEDURE

The module programming procedure is consistently completing the required fields on the persistence and saving entered data.

For the data saving it is necessary to push button “Save Data”.

After saving data for the checking will be needed to read new module configuration (push button “Read Data”).

Samples of programming data are shown below.



The screenshot shows the 'GuardMagic VF1/VF2 Programming Tool' window. The interface is divided into several sections:

- Unit Data:** Unit Type: GuardMagic VF2 (0.1/1.2), Unit SN: 16777215.
- Unit Settings:** Unit Name: VF2 Demo, Baud Rate GPS: 4800 bps, Engine Blocking Status (unchecked).
- Connection Setting:** APN: apn1, User Name: 1234567890, Password: 12345678901, Host IP/Port: 77.74.50.102, 20167.
- Data Recording:** Data Fixing: 5 sec, Active Standby: 15 min.
- Mode:** Transport (unchecked), Special Machinery (checked), Adaptive Speed (checked).
- Activated Records:** Analog Fuel (unchecked), Digital Fuel (checked), Tank 1 (unchecked), Tank 2 (checked), Tank 3 (checked), FST-code (checked), Service Record (checked).

At the bottom, there is a footer with the company name 'GuardMagic, Riga, Latvia (EU)', website URLs, and a row of buttons: 'Get Log', a dropdown menu showing '4800', another dropdown menu showing 'COM4', a highlighted 'Read Data' button, and a 'Save Data' button.

For exit from the program it is necessary to press the button "".

10.APPENDIX (WIRING DIAGRAM OF GUARDMAGIC VF1, VF2 MODULES)

Power - main connector (10 PIN)

PIN	NAME	DESCRIPTION
1	+12 V	DC Power +12 V
6	GND	Ground

RS-232 connector (4 PIN)

PIN	NAME	DESCRIPTION
1	GND	Ground
3	RXD	Data RX
4	TXD	Data TX