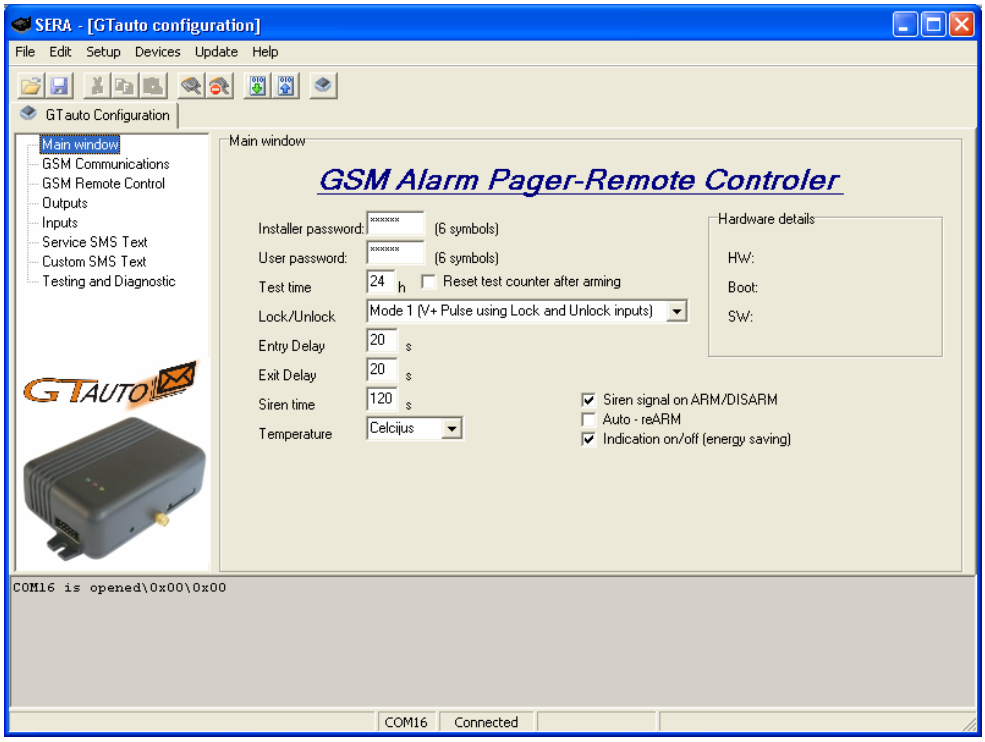
SERA

Software for configuration and testing of GSM alarm system in Microsoft Windows environment

User's guide



Content

1. Installation of SERA software

Open the folder containing installation of the software SERA. Click the file „SERA setup.exe"from the mentioned folder.

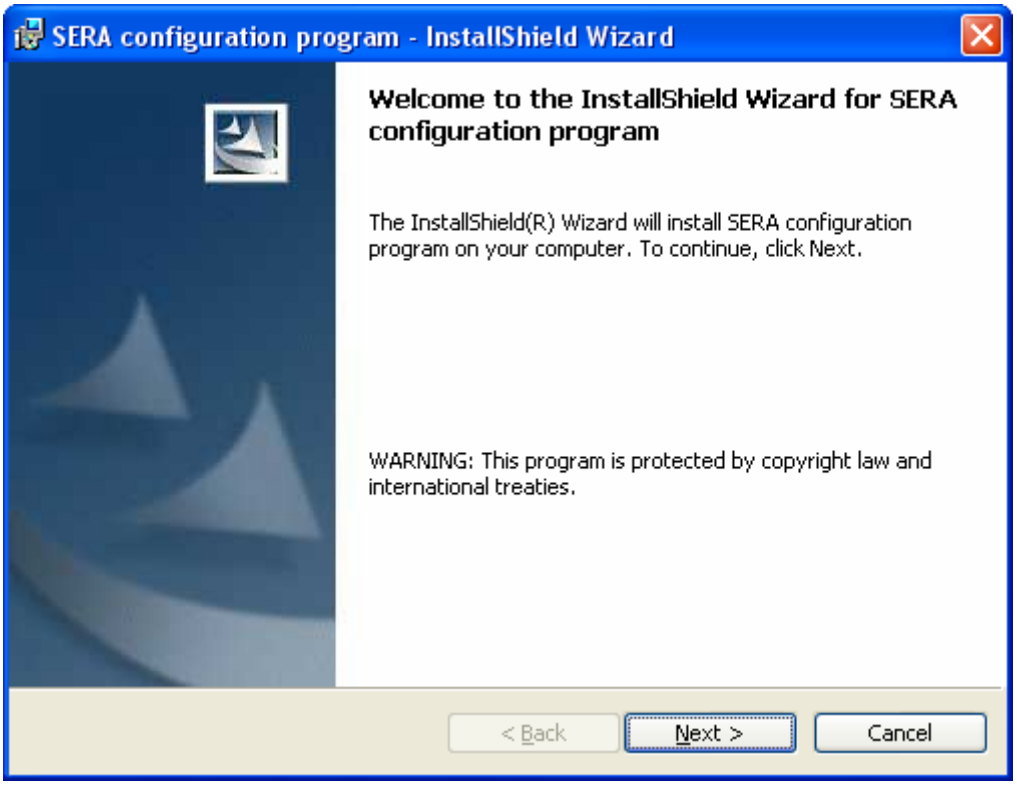


Fig. 1

In the displayed Window press [Next>].

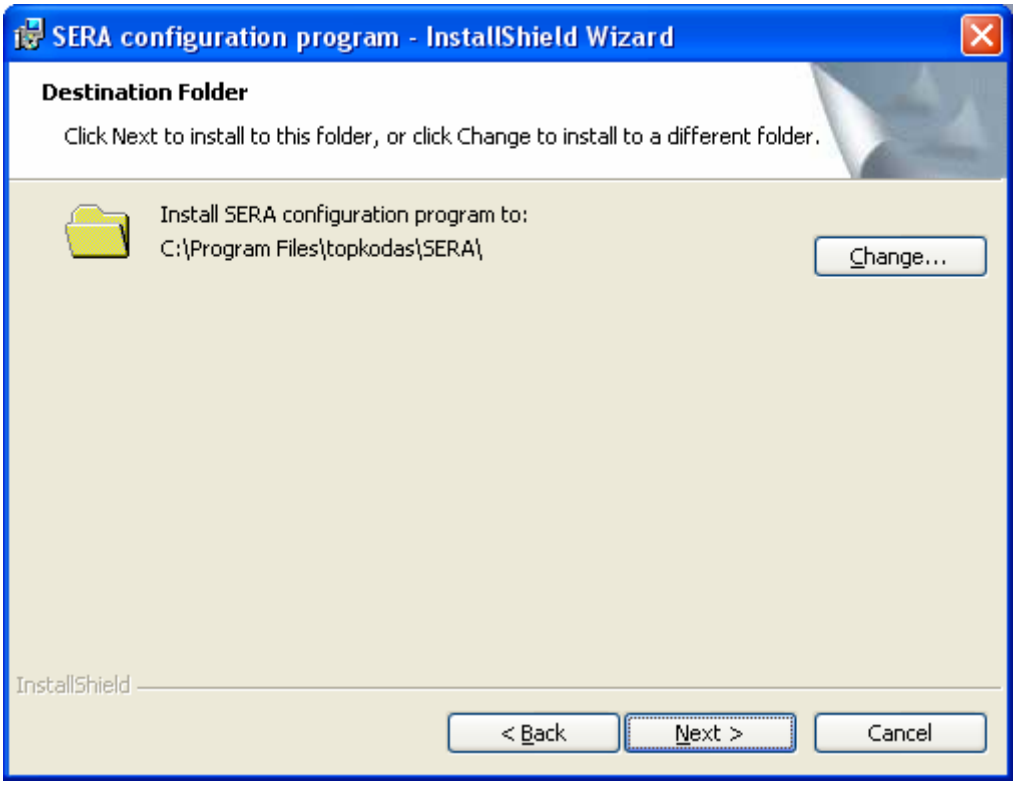


Fig. 2

Installation directory will be displayed in the Window (Fig. 2). If installation directory of the software is OK press "Next". If you would like to install the software in the other directory press [Change], specify other installation directory and then press „Next>".

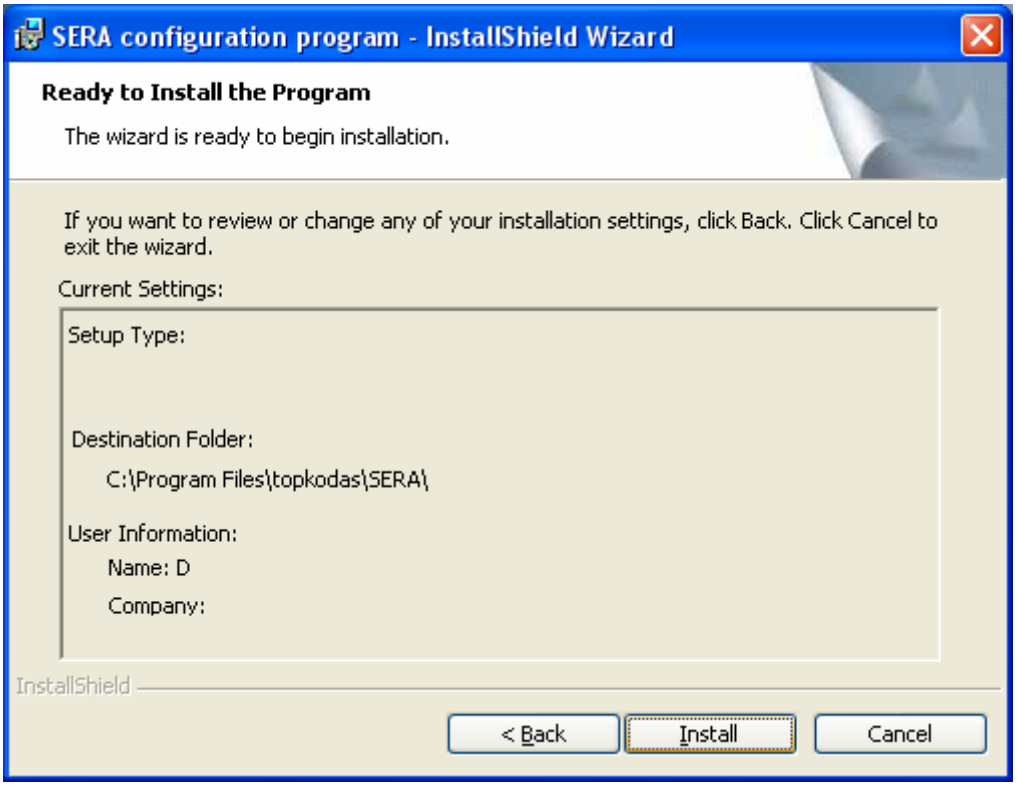


Fig. 3

Check if the correct data are entered and press "Install" in the displayed Window (Fig. 3).

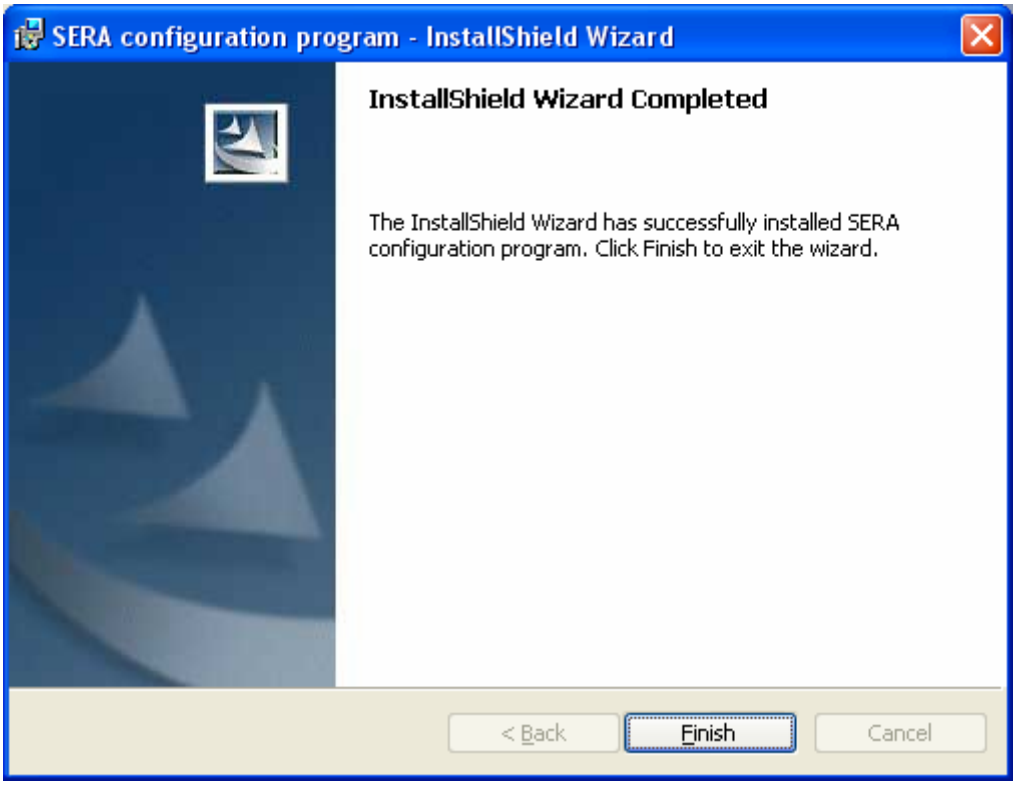


Fig. 4

After successful installation of the software SERA, press [Finish] in the displayed Window (Fig. 4).

Congratulations, you successfully installed the application SERA in your PC.

2. Installation of USB drivers (if a programming cable with USB terminal is used).

***SKIP THIS INFO IF PROGRAMMING CABLE WITH RS232 CONNECTOR IS USED.**

In order to configure GTAUTO via USB interface it is necessary to install USB VIRTUAL DRIVER package. This package can be found together with SERA installation (file „CDM 2.02.04 WHQL Certified.zip“ or later). Firstly open the file „CDM 2.02.04 WHQL Certified.zip“ and extract it into any directory. You may also use CDM 2.04.06.exe (this application will automatically install the driver into your PC).

After connection of USB cable **(the module must be supplied with + 12V) to the PC via USB interface the Window (Fig. No 5) will be displayed.** It means that OS Windows prompts to install driver „FT232R USB UART“. In order to successfully install this driver follow instructions of installation.

- **Installation of FT232R USB UART driver**

Fig. 5

Select [„No, not this time“] in the displayed Window (Fig. 5) and press [„Next>“].

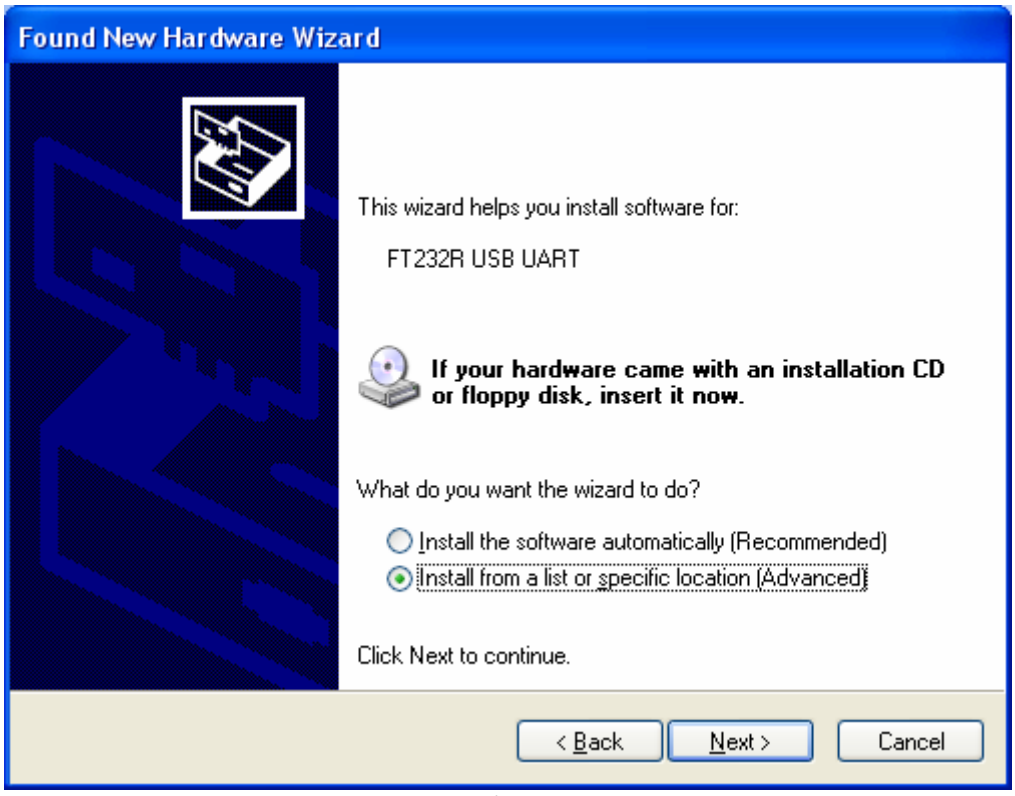


Fig. 6

Select „Install from a list or specific location (Advanced)“ and press „Next>“ in the displayed Window (Fig. 6).

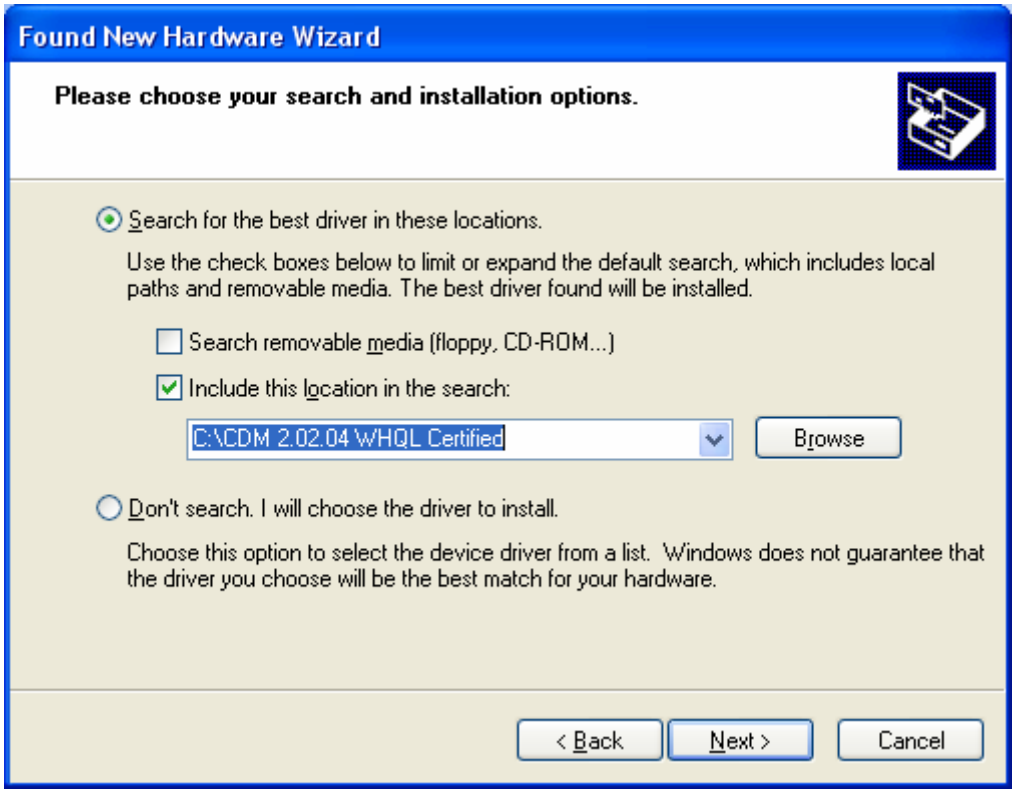


Fig. 7

Select „Search for the best driver in these locations“in the Window (Fig. 7) and check box „Include this location in the search:“, select „Browse“ and to indicate directory, where the file „CDM 2.02.04 WHQL Certified.zip“ has been extracted. Press „Next>“.

Fig. 8

Displayed Window (Fig. 8) means that your PC has found file necessary for driver's installation and successfully installed it. Press „Finish“Installation of FT232R USB UART driver has been finished.

Attention! If Window is not displayed (Fig. 8) it means that file necessary for installation has not been found. Ensure whether path towards directory of extracted „CDM 2.02.04 WHQL Certified.zip“ file specified in Window (fig.7) is correct. Press „<Back“ to return to Window (fig.7) and ensure whether directory of extracted file „CDM 2.02.04 WHQL Certified.zip“ is specified corrected.

Immediately after successful installation of driver „FT232R USB UART“ Window (Fig. 9) will be displayed. It means that OS Windows prompts to install driver „USB Serial Port“. In order to successfully install this driver follow instructions of installation.

- **Installation of USB Serial Port driver**

Fig. 9

Select „No, not this time“ in the displayed Window (Fig. 9) and press „Next>“.

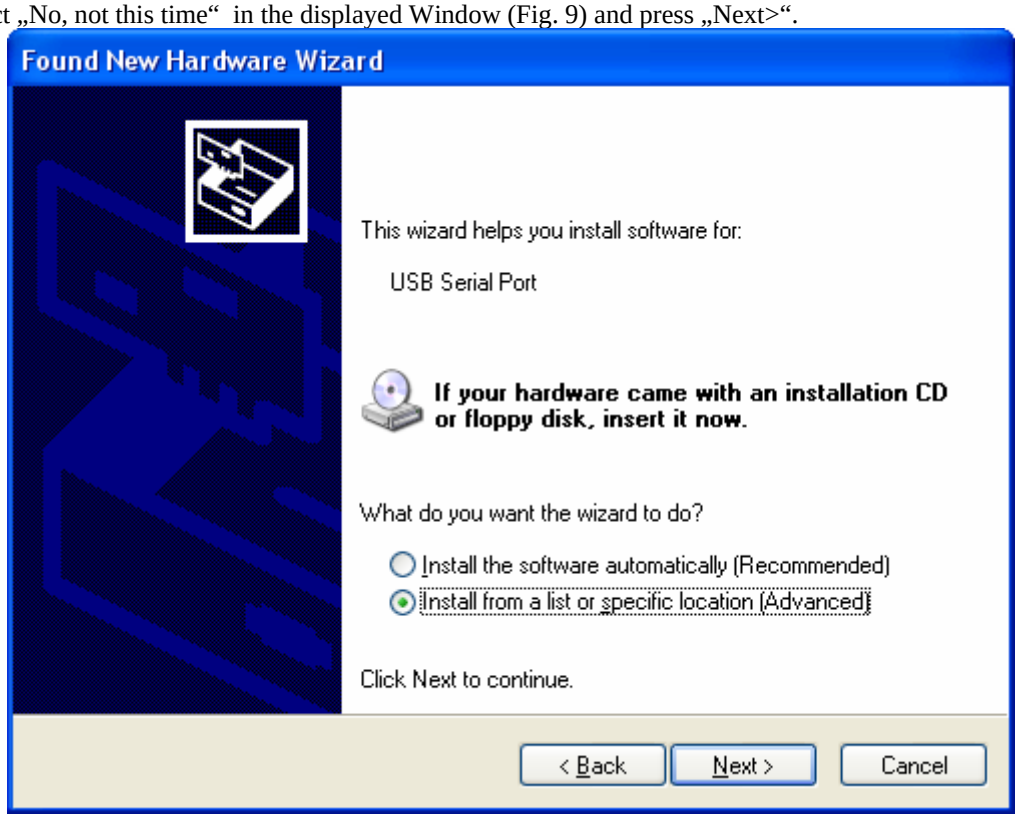


Fig. 10

Select „Install from a list or specific location (Advanced)“ and press „Next>“ in the displayed Window (Fig. 10).

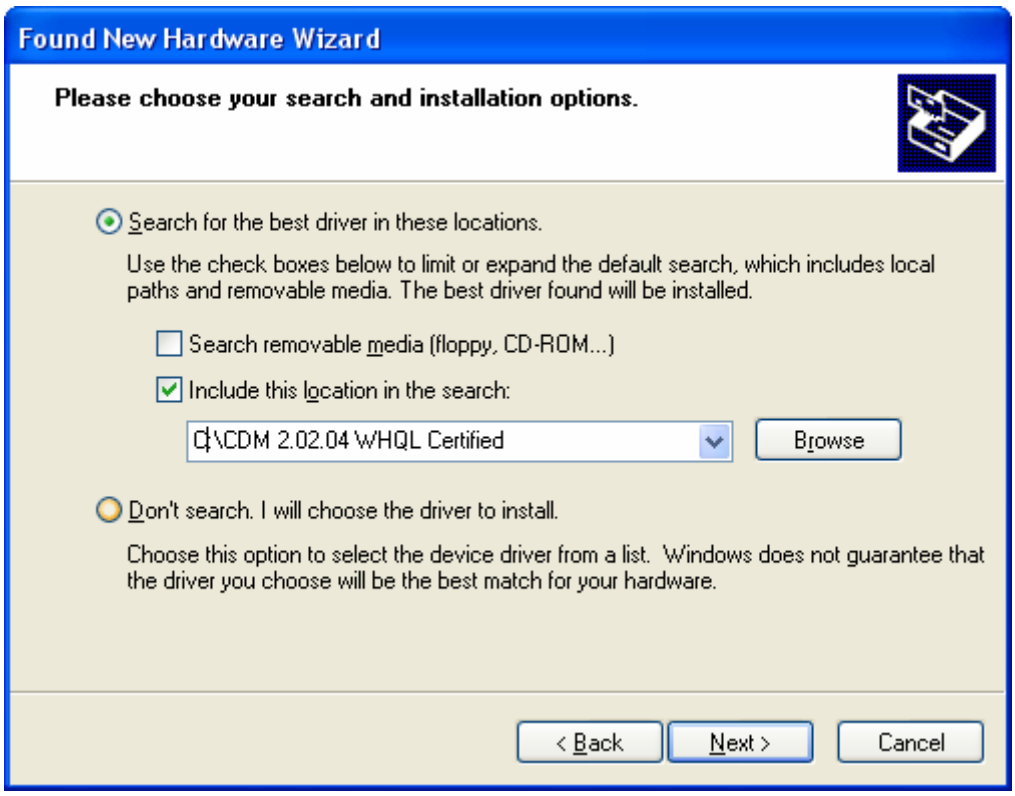


Fig. 11

Select „Search for the best driver in these locations“ in the displayed Window (Fig. 11) and check box „Include this location in the search: “, select „Browse“ and to indicate directory, where the file „CDM 2.02.04 WHQL Certified.zip“ has been extracted. Press „Next>“

Fig. 12

Displayed Window (Fig. 12) means that your PC has found file necessary for driver's installation and successfully installed it. Press „Finish“Installation of „USB Serial Port“is finished.

Attention! If Window is not displayed (Fig. 12) it means that the file necessary for installation has not been found. Check whether path towards directory of extracted „CDM 2.02.04 WHQL Certified.zip“file specified in Window (Fig. 11) is correct. Press „<Back“to return to Window (fig.11) and check whether directory of extracted file „CDM 2.02.04 WHQL Certified.zip“ is correct.

PC is successfully prepared for operation with configuration-testing application „SERA“.

3. Selection of COM port

After installation of drivers it is necessary to check for which COM port USB used for configuration of the module has been assigned to. To perform this task in Windows environment follow the instructions mentioned below.

***If the module „GTAUTO“ is being connected via RS232 cable and if you are aware of which COM port it is connected to, remeber the numeber of this COM port and skip the present clause. Awareness of COM port number is necessary in order to indicate proper COM port in the application „SERA“the module „GTAUTO“ is connected to.**

Attention! The module „GTAUTO“ must be supplied with +12V (bus leads: black (-), red (+)) and PC via USB interface. DO NOT supply voltage for the module from PC power supply unit, because absence of common mass between two PC power supply units may damage the module.

Open the Window „System Properties“(path „Start“ > „Control Panel“ > „System“). „System Properties“ Window (fig. 13) is being displayed.

From the Window „System properties“select the tab „Hardware“. After selection of the tab „Hardware“ Window (Fig. 13) will be displayed.

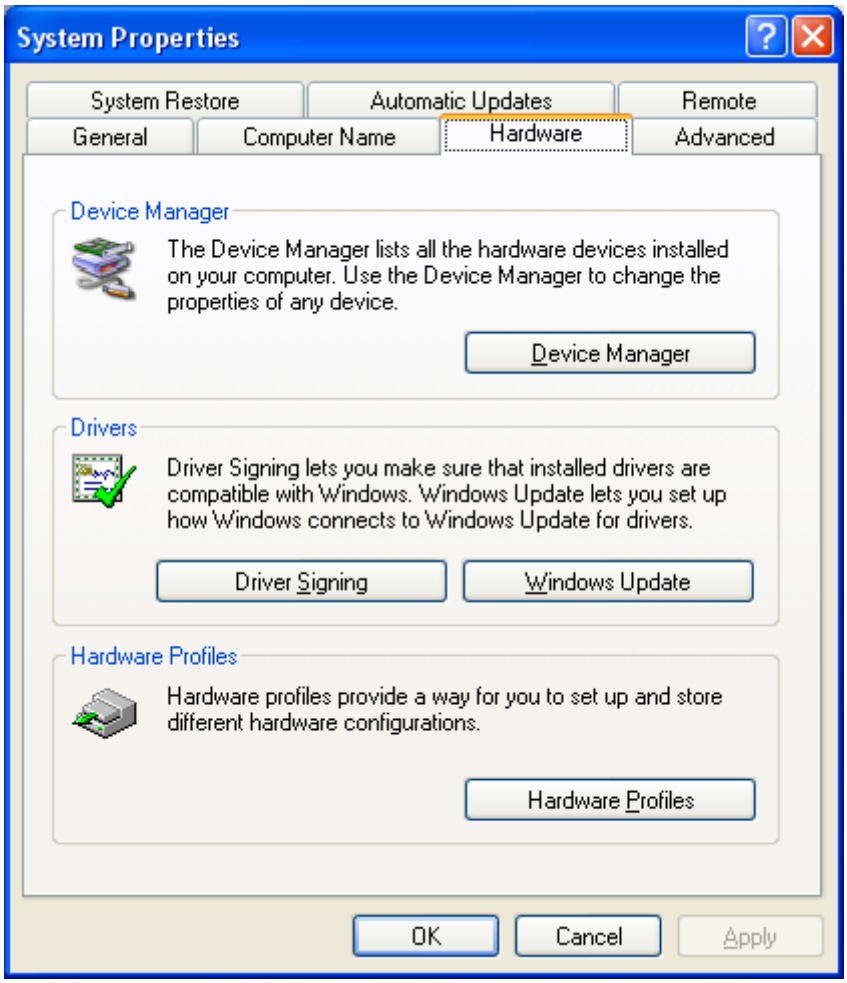


Fig. 13

Select „Device Manager“ from the tab „Hardware“. Window (Fig. 14) will be displayed.

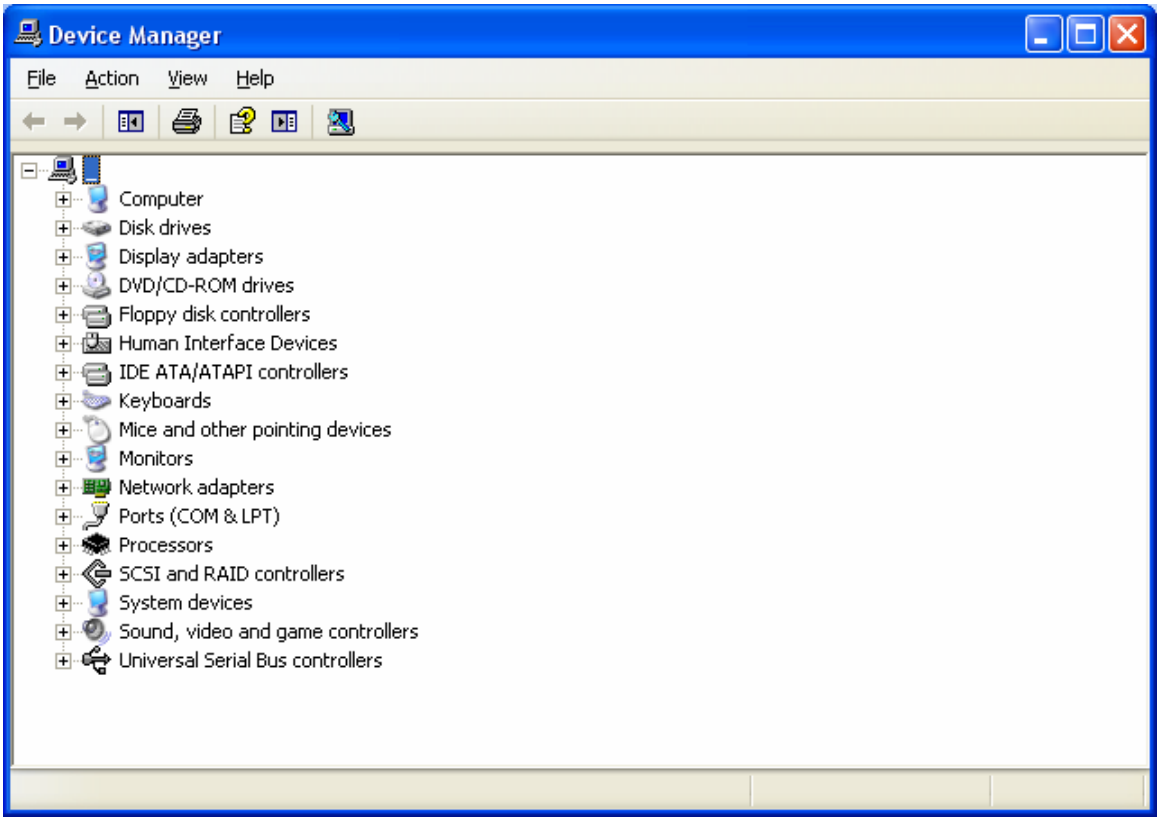


Fig. 14

In "Device Manager" Window click „+“ symbol near „Ports (COM & LPT)“ in order to scroll „Ports (COM & LPT)“ menu. If the module is powered with +12V and it is connected to the PC via USB port, thus upon scrolling Ports (COM & LPT)“, Window (Fig. 15) will be displayed.

Attention! If the module „GTAUTO“ is not powered with +12V and it is not connected to the PC via USB interface, menu „Ports (COM & LPT)“ clause „USB Serial Port“ will not be visible.

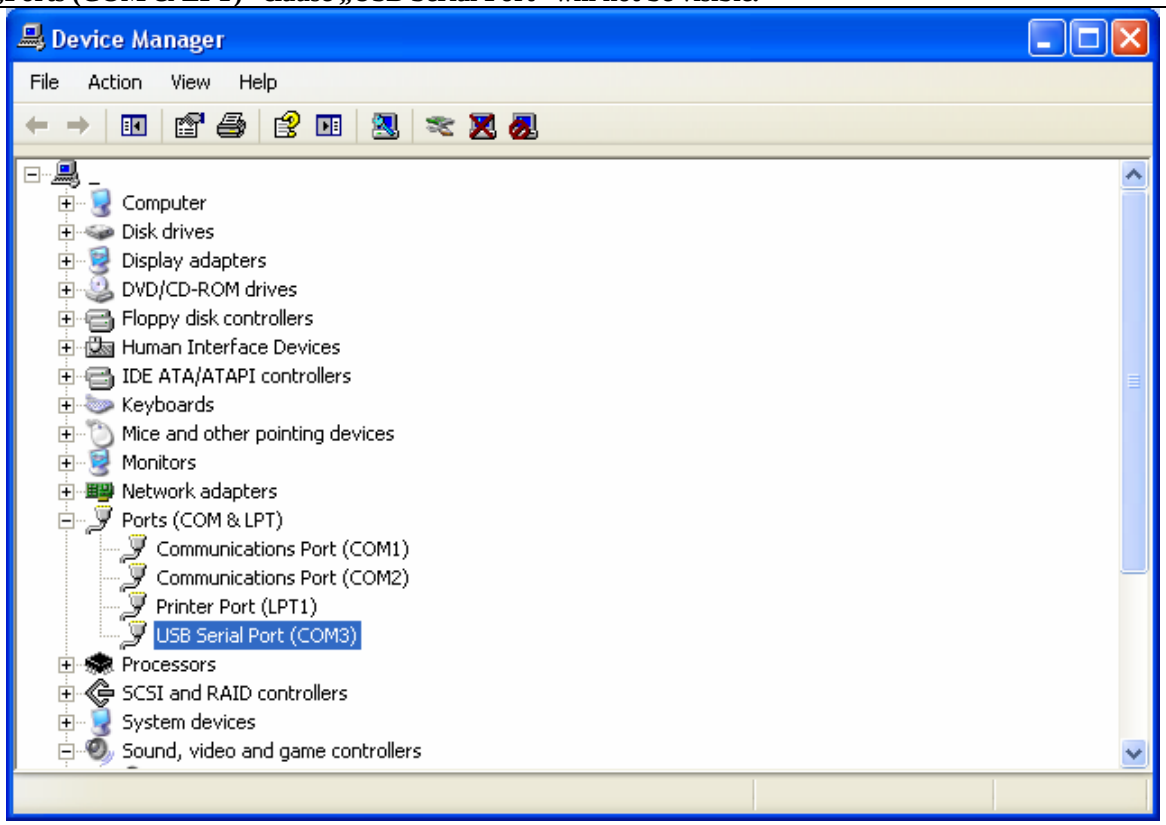


Fig. 15

From the displayed Window (Fig. 15) you must select COM port USB interface is assigned to. Line „USB Serial Port (**COM3**)“ is displayed in the example (Fig. 15). This means that USB will be assigned to COM port. **Remember this COM port number and go to the clause „Work with application SERA“.**

Attention! If COM port number (Fig. 16) automatically assigned to USB interface is not right, you may change it. Follow the instructions.

In order to change COM port number drag cursor on „USB Serial Port (e.g.: COM3, Fig. 15) and use double-click of the right key in displayed menu “Properties”. Window (Fig. 16) will be displayed.

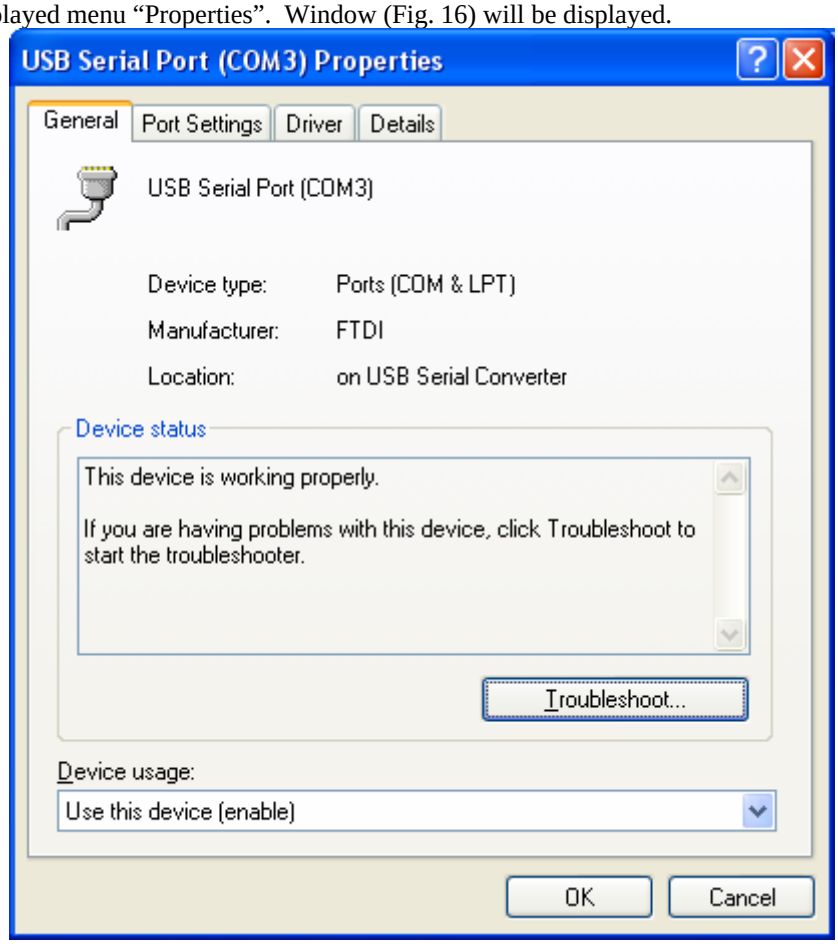


Fig. 16

Select tab „Port Settings“ from Window (Fig. 17). Window (Fig. 17) will be displayed.

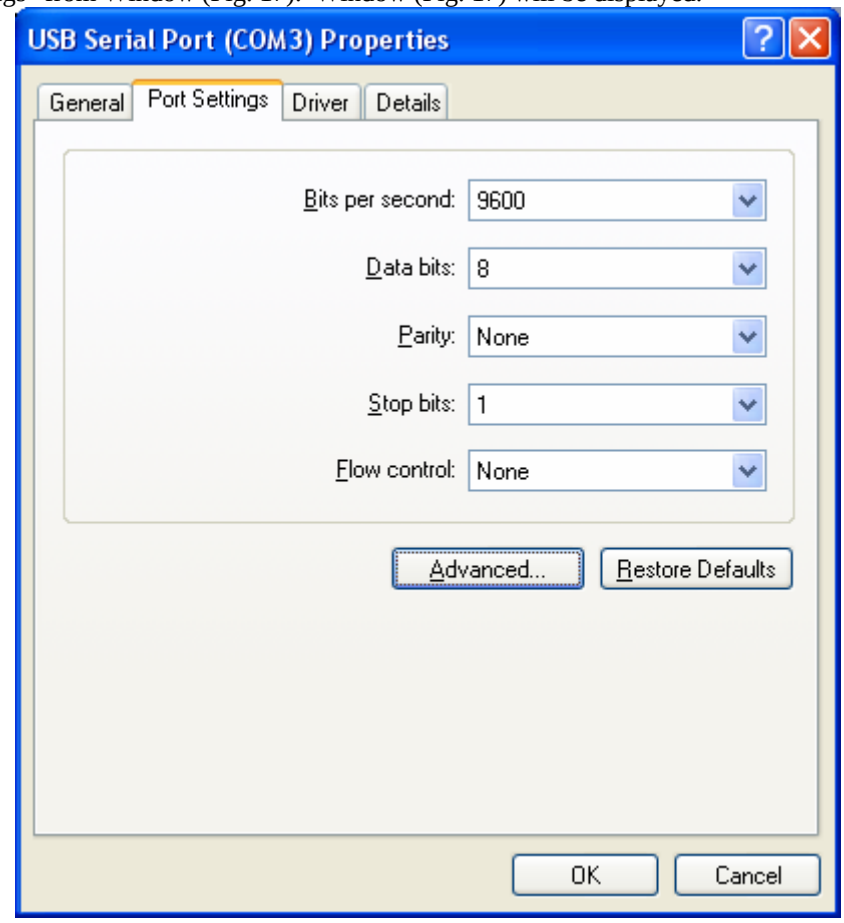


Fig. 17

Select „Advanced...“ from the Window (Fig. 17). Window (Fig. 18) will be displayed.

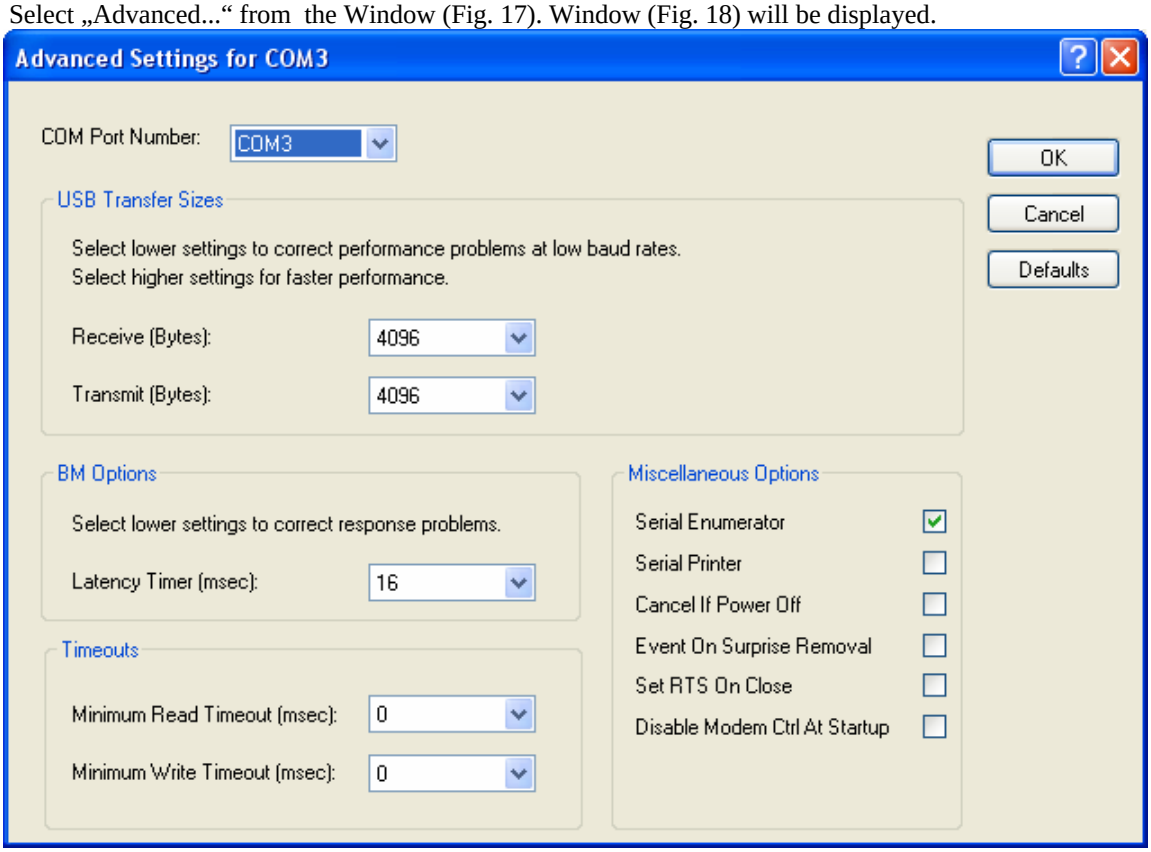


Fig. 18

COM port assigned to USB is displayed near the line Scroll up the menu (Fig. 19).

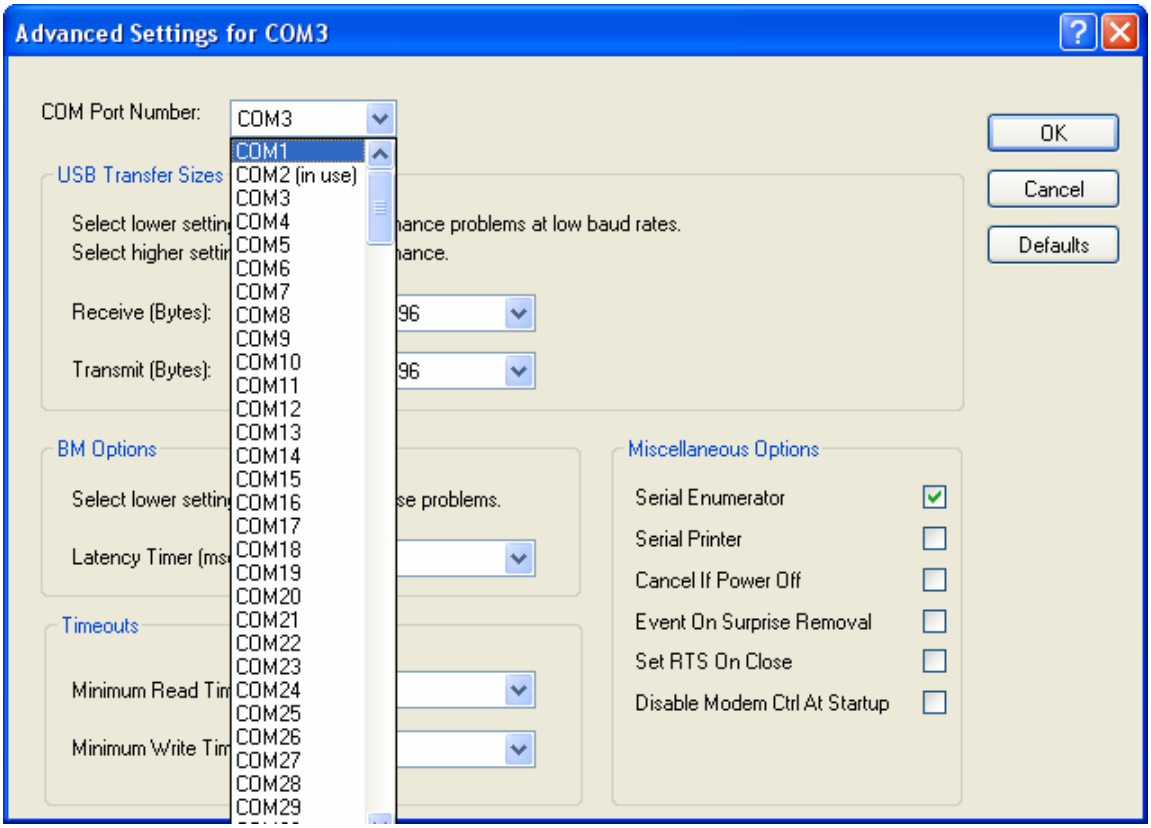


Fig. 19

Specify suitable COM port, which is not marked as "in use" from Window (Fig. 19). Having performed these actions press “OK”. Now after opening Window (Fig. 15) near the line “USB Serial Port ()” you should see the same COM port you selected from Window (Fig. 19).

Attention! Remember the COM port specified near the line „USB Serial Port(COM?)“

4. Connection of the GTAUTO module to your PC

The module must be powered with +12V voltage, it should have inserted SIM card (including account balance and **PIN CODE REQUEST OFF**), connected GSM antenna and the module must be connected to the PC via programming cable.

5. Work with the software SERA

Start the software SERA. Go to [Start>All programs>Topkodas>SERA>SERA] or go to installation directory and click „SERA.exe“.

After starting the program the Main Window is displayed (Fig. 20).

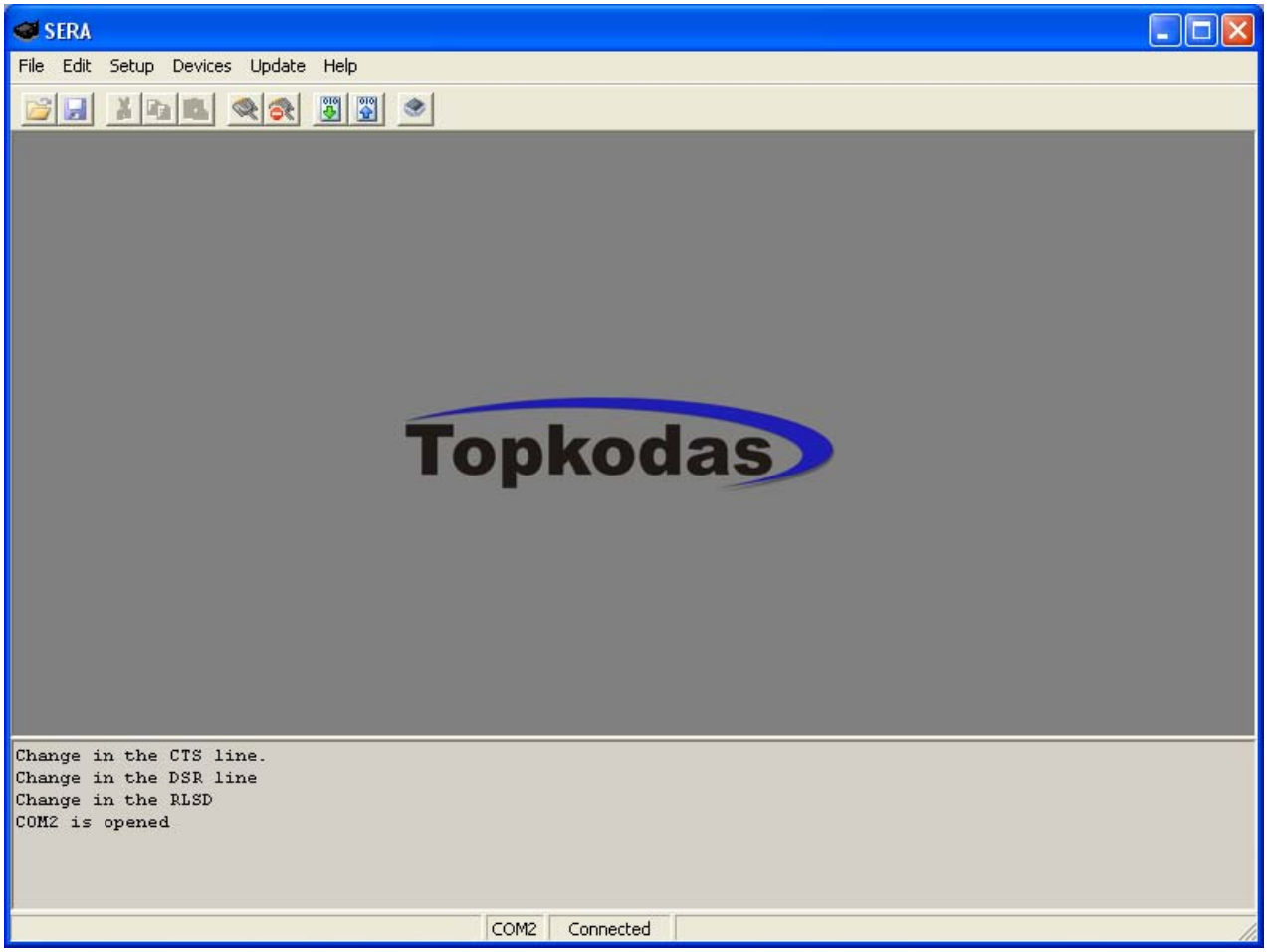


Fig. 20

If the module is fully connected to the PC and power supply (DO NOT supply voltage for the module from PC power supply unit, because absence of common mass between two PC power supply units may damage USB port !) select [Devices>GTauto v3]. (Fig. 21)

Fig. 21

After selection, the main configuration Window of „GTAUTO“ will be displayed (Fig. 22)

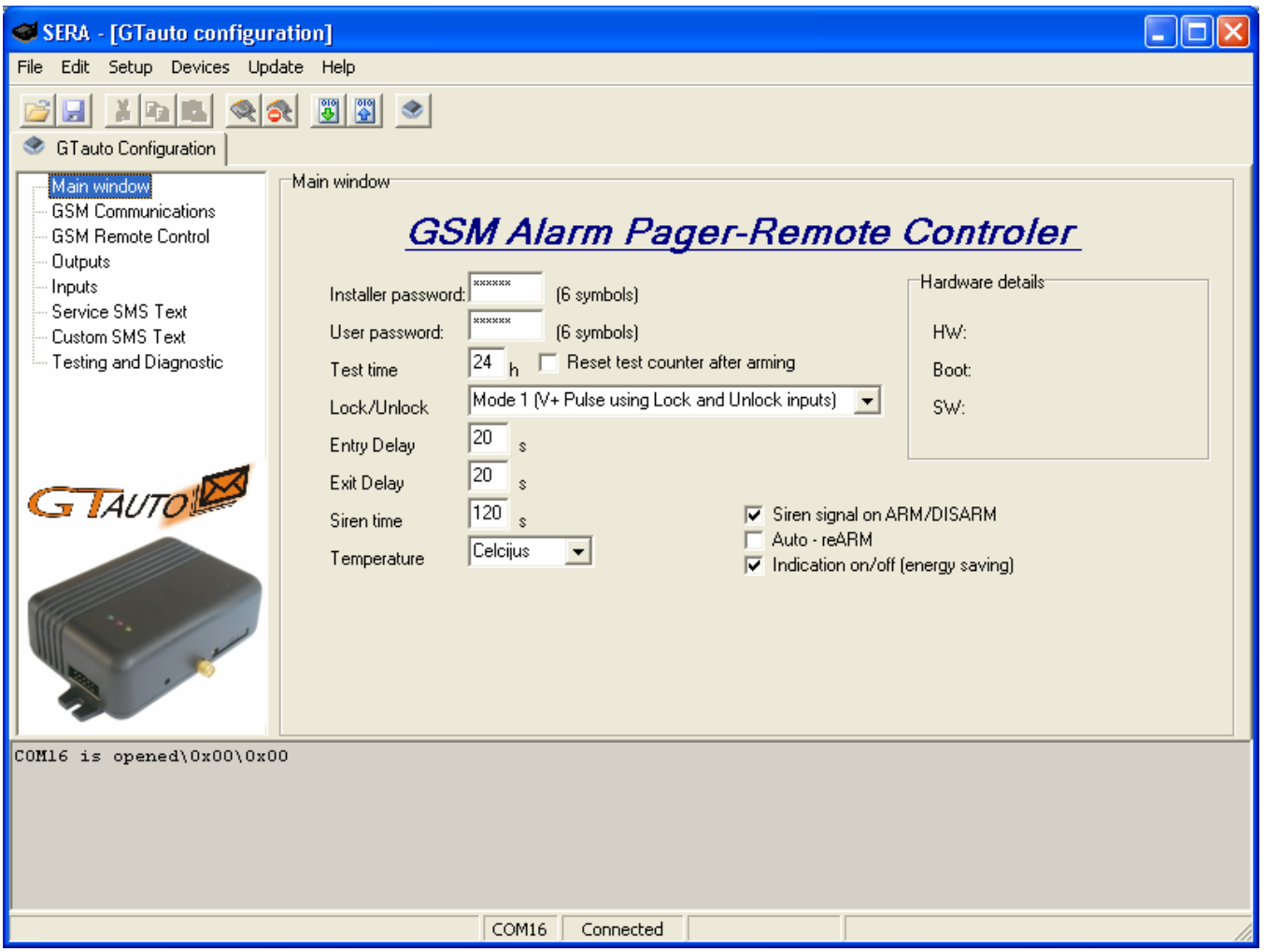


Fig. 22

Set the COM port to initialize the „GTAUTO“. Go to [Setup>Serial Port...] (Fig. 23).

Fig. 23

Window „Serial Port Setup“ is being displayed (Fig. 24). Scroll list and select COM port, you set in clause **“4. Selection of COM port”.** Press OK.

Attention! If you do not know the COM port the module is connected to, try each COM port each time after selecting COM port perform „GTAUTO“ testing. If test is successful it means that COM port is selected properly.

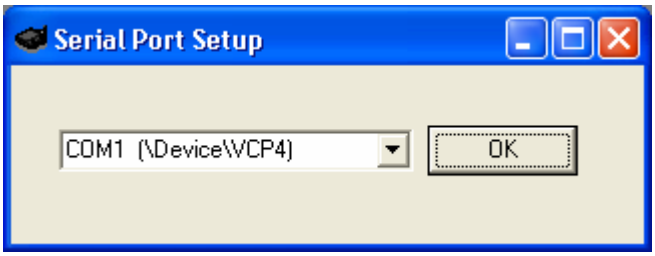


Fig. 24

Upon setting COM port information of the module should be read out. Go to [File>Read Device] or press „Read Configuration“ icon (Fig. 25 „Read Configuration“ icon)

Fig. 25 „Read Configuration“ icon

Attention! Each time after configuring the module press „File“ > „Write Device“ or press „Send Configuration“ icon (Fig. 26 **„Send Configuration“ icon**) thus the application „SERA“ will include configuration changes into „GTAUTO“ module!

Fig. 26 „Send Configuration“ icon

5.1. Content of module’s configuration

Fig. 27

Configuration content is available at the software (Fig. 27). To open configuration window according to selected content menu click preferred part of the content.

5.2. Main Window of the software SERA

Main Window of the software SERA is displayer in (Fig. 28). This Window is displayed automatically when the „GTAUTO“device is selected [Devices>GTauto v3]. It also may be selected from the content of the module.

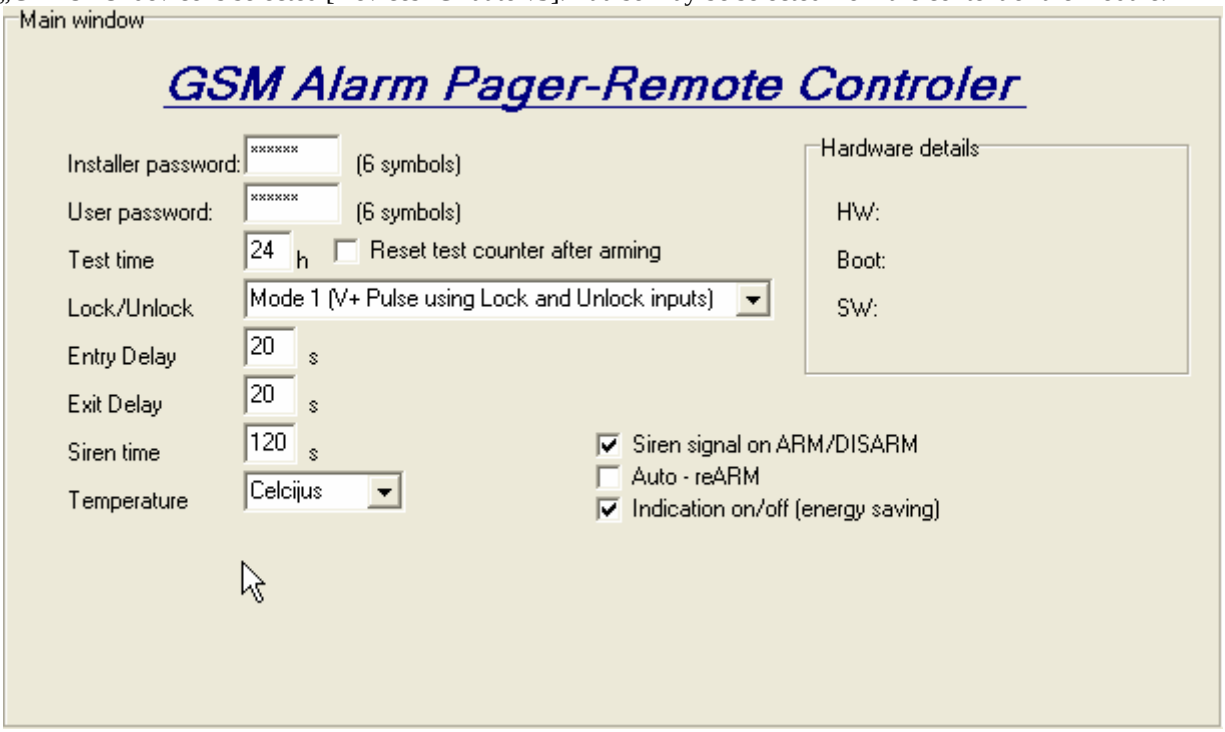


Fig. 28

Explanation of “Main window” field:

Installer password	It is installer password comprised from 6 symbols, when the module is being configured via SMS messages.
User password	It is user’s password comprised from 6 symbols used each time in order to control or receive information from the module „GTauto“by a user.
Test time	Time period to inform how much time it will take to send informative SMS message to a user. Discretion of test setting time is one hour.
Reset test counter after ARMing	If a check box near this note is checked time of sending informative SMS message will be calculated from the beginning each time after security system is in ARM mode.
Lock/Unlock	When connecting the module to the central lock, it is necessary to set signals the module will enter ARM/DISARM modes. 5 versions is possible: **Disable – programmable block of** LOCK and UNLOCK inputs. The module will show no reaction towards signals in LOCK and UNLOCK inputs. • Mode 1 (V+ Pulse using Lock and Unlock inputs) uses two inputs Lock and Unlock. Lock input sets ARM mode after pulsing or steady signal. Unlock sets DISARM mode. It is comfortable to use 1 or 2 mode when connecting the module to the central lock of vehicle. Central lock mostly generates lock and unlock signals with two wires. • Mode 2 (V- Pulse using Lock and Unlock inputs) as in 1 mode only inverted. • Mode 3 (V+ Level using Lock input) uses only one Lock input. Unlock input is not used. These modes are comfortable to use when activating/deactivating the system by using switch or other access control device. • Mode 4 (V- Pulse using Lock and Unlock inputs) as in 3 mode only inverted.
Entry Delay	Input time in seconds. The system starts calculating this time period after activation of *Delay* type zone. If during that time the security system will not be disarmed, The module will activate alarm state, siren switch on, SMS will be send about

	alarmed zones.
Exit Delay	It is insensibility time (seconds) of the module into *Delay* and *Interior* type inputs before the module enters to ARM mode. This means that during calculation of this time period, the module will not activate alarm even if inputs will be activated.
Siren Time	This time value specifies how long the Siren of security system will be active after occurrence of alarm. Time period should be set in seconds from 1 sec to 999 sec.
Indication	**on/off (energy saving) – if this box is checked** it means that setting is On. If the box is not checked the setting is Off. **On** mode – all LEDs available in the module are active and indicate activity of the module. **Off (energy saving)** mode - operates only red LED available in the module, operation of GSM modem is being indicated. *red „control“ LED is always active on bus leads not depending from **Indication mode.**
Siren Signal on ARM/DISARM	This is ARM/DISARM confirmation by short Siren signal.
Auto re-ARM	If checkbox is checked auto rearm function is enabled. This means what if module is DISARMED by phone and any of inputs has no action, when the module automatically returns to AMR state.
Temperature	It is temperature scale. Two scale types are possible, one of which may be selected after scrolling menu near the note “Temperature”: • Celsius – temperature indications according to Celsius scale. Fahrenheit – temperature indications according to Fahrenheit scale.
Hardware details	This is info about „GTauto“ module: **HW** – hardware version of the module. **Boot** – start up program version (BOOT) This part of the program is able to update Firmware SW. **SW** – Firmware version of the module.

5.3. Window “GSM communication options”

In order to open Window **“GSM communication options”, it is necessary to select „Communication“ clause (**Fig. 27**) from the left side.** The Window (Fig. 29) including users table whom GSM SMS messages are being sent and calls are being made. Amount of users is up to 16. Quick double click on the selected line will display selected user‘s window (Fig. 30) where user‘s parameters are being used. User numbers should be entered with international code. Beside telephone number of each user click checkboxes about which events will be sent to a user.

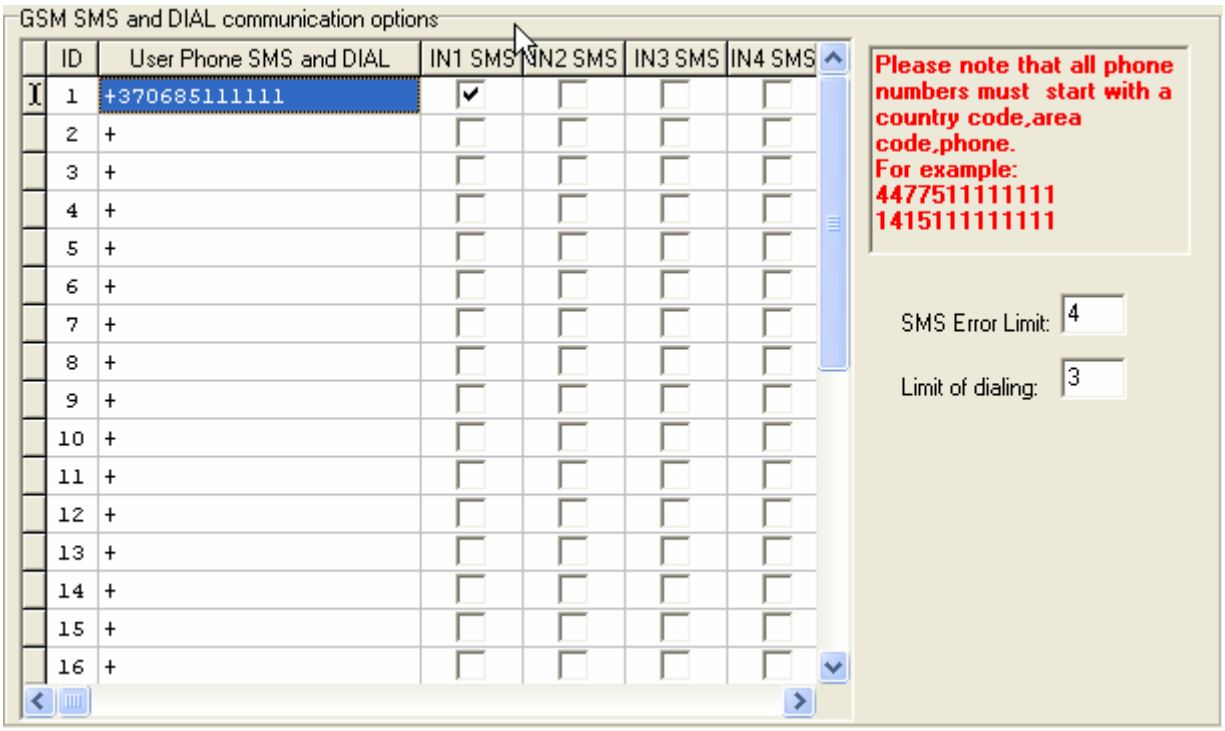


Fig. 29

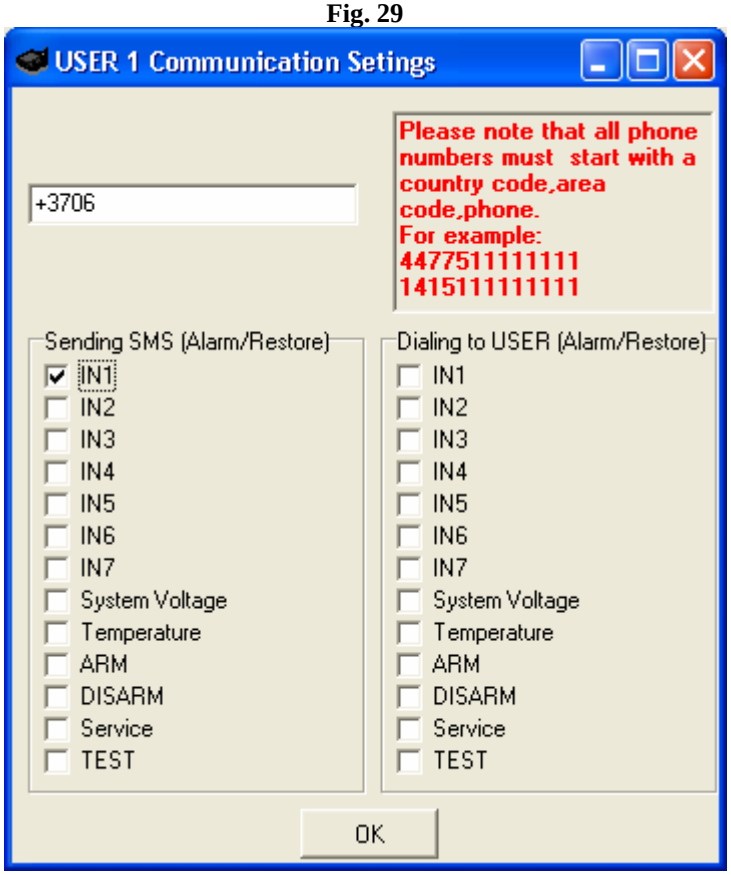


Fig. 30

Explanation of fields of “**GSM communication options**” Window:

ID	ID of the user whom SMS will be sent and calls will be made.
User Phone SMS and DIAL	This column includes user phone numbers to whom GSM

	SMS messages will be sent and short calls will be made.
Sending SMS (Alarm/Restore)	Where checkboxes are checked, these events will be send to selected users via SMS (Fig. 30)
Dialing to USER (Alarm/Restore)	Where checkboxes are checked, a user will be notified bout these events by making him a short call. (Fig. 30)
SMS error limit	SMS repetition limit in a case of failure to send SMS.
Limit of dialing	It is a number, which specifies the amount of times to call to a user's telephone after occurrence of alarm, if a user does not cancel call of the module.

5.4. Window "GSM remote control"

To open Window **"Remote Control by Dialling",** it is necessary to select **„GSM Remote Control" clause (**Fig. 27**) from the left side.** Window (Fig. 31) will be displayed for users who will be able to control the module via short call. The module will identify caller ID and if this ID will be available in the table, the module will perform selected action. **Amount of users is up to 400.**

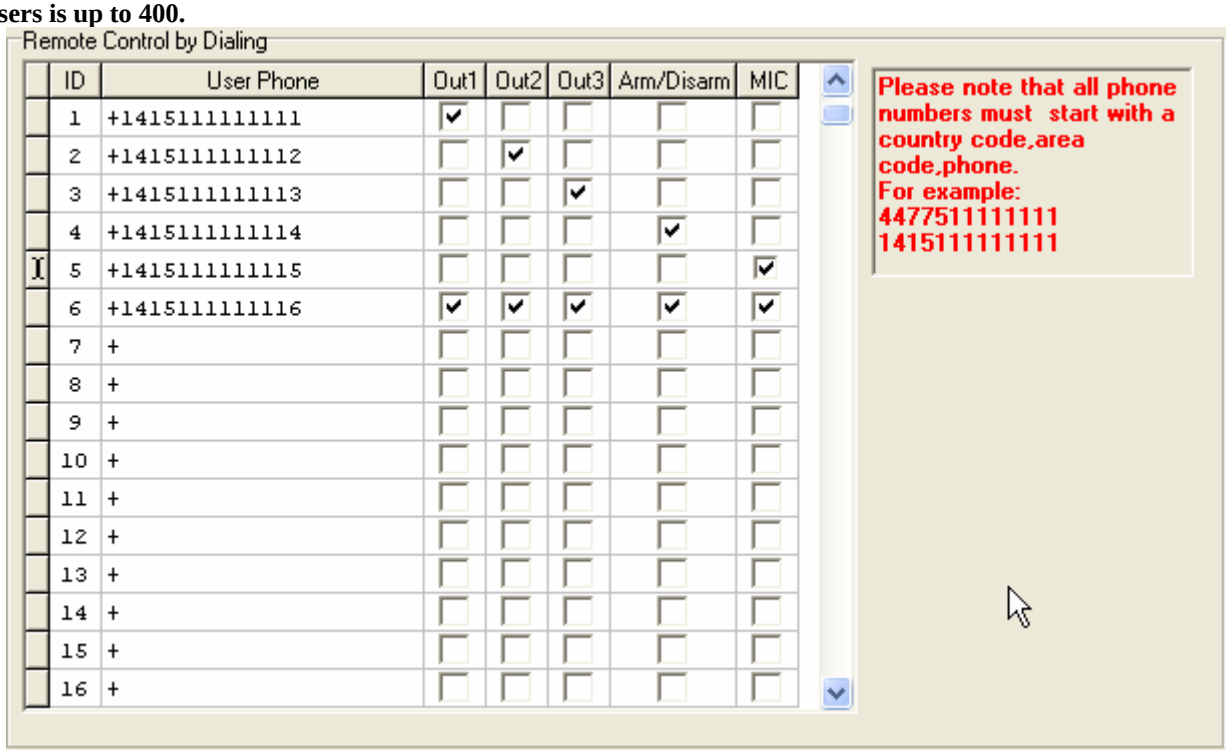


Fig. 31

Explanation for fields of **"Remote Control by Dialing":**

ID	ID number of a user who is able to control the module via short call.
Remote User Phone	Telephone numbers of users who will be able to control the module via short call should be entered in this column.
OUT1, OUT2,OUT3	Where checkboxes will be checked, these inputs will be switched, if a user will call from this number. Preferred output may be assigned to each user's number. Thus different users are able to control different objects.
ARM/DISARM	If this checkbox is checked, a user will be able to ARM/DISARM the security system via short call.
MIC	If checkbox is checked a user will be able to activate microphone and to switch on voice listening.

5.5. Langas “Outputs”

In order to open Window “Outputs”, it is necessary to select „Outputs“clause (Fig. 27) from the left side.

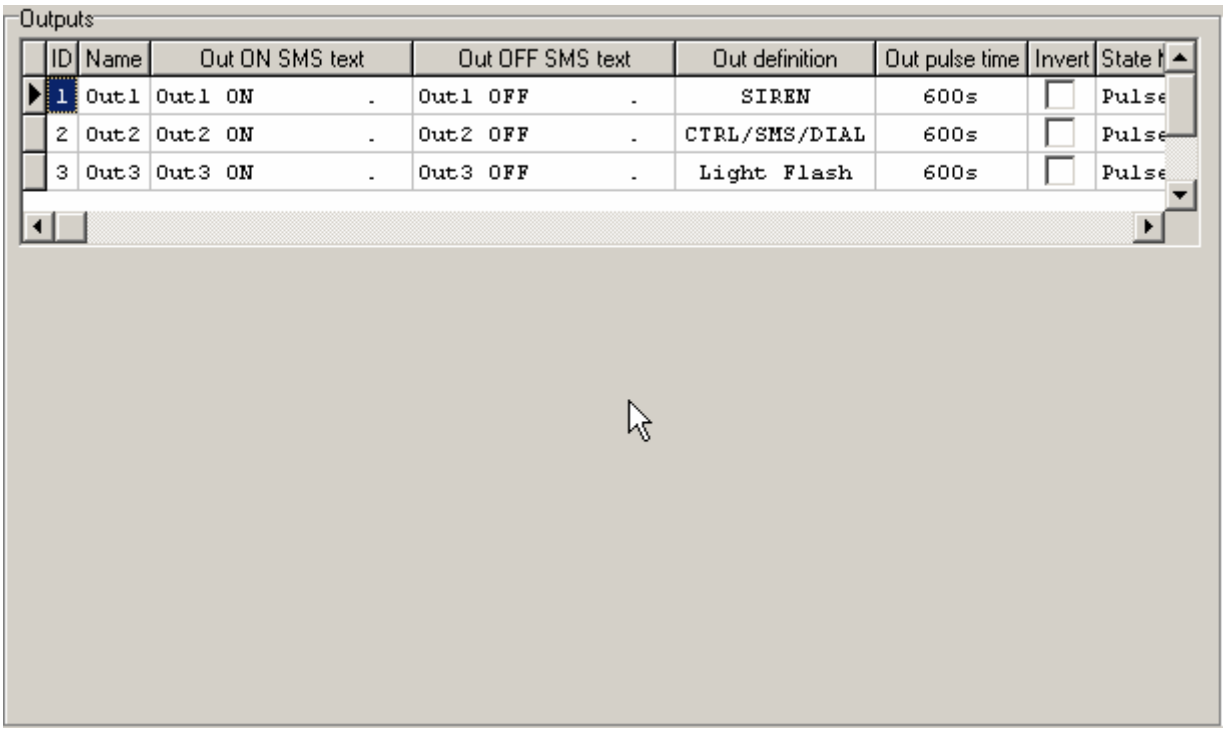


Fig. 32

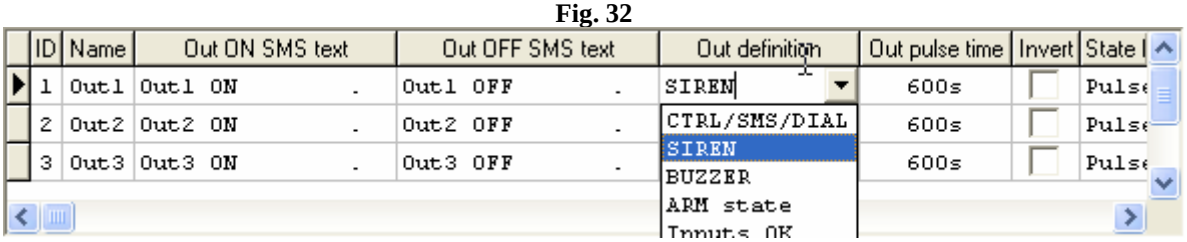


Fig. 33

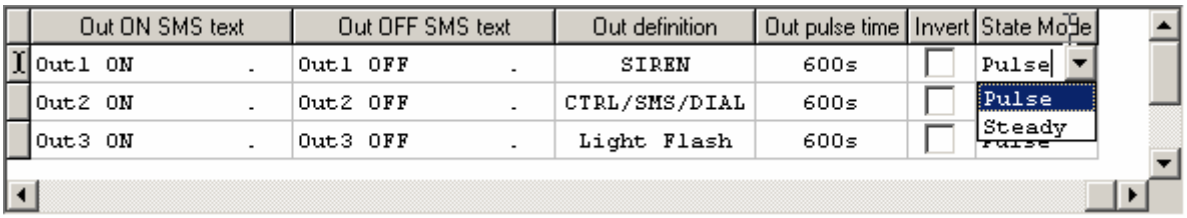


Fig. 34

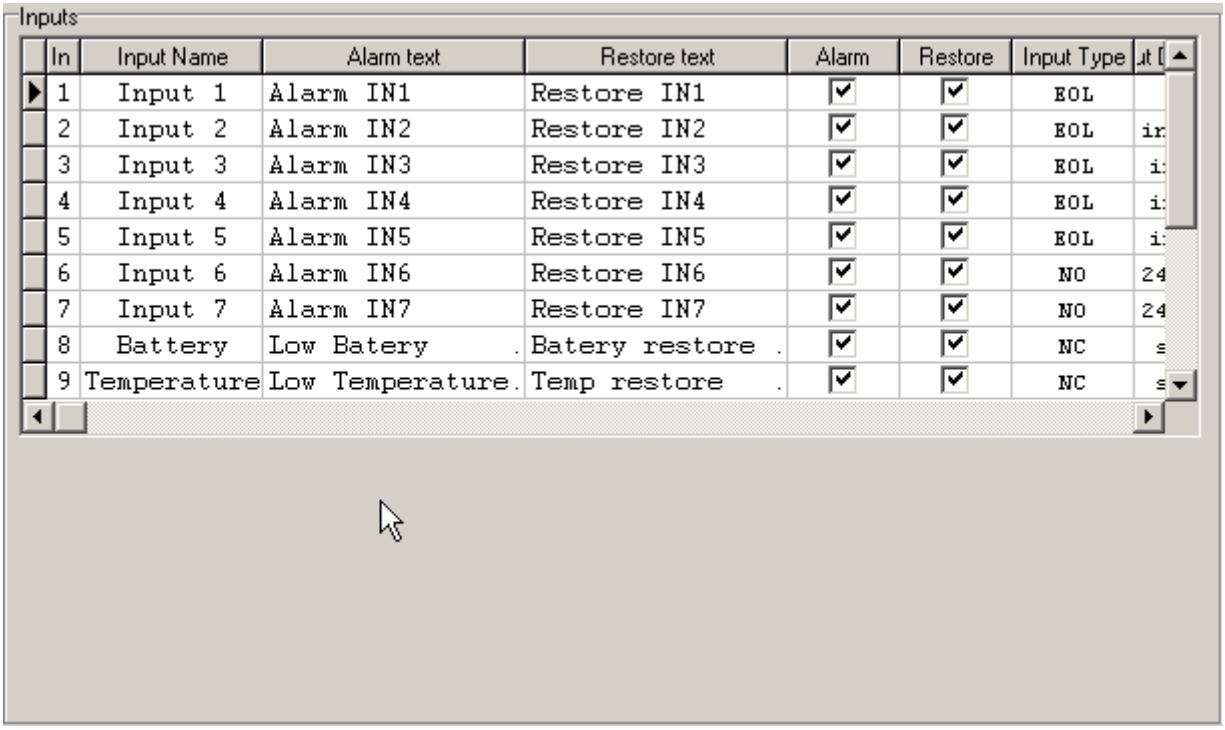
Explanation of fields of “**Outputs**” Window:

ID	Output ID number
Name	Output name
Out ON text	It is a text, which will be sent to a user after activation of output by the module. This text may be changed.
Out OFF text	It is a text, which will be sent to a user after deactivation of output by the module. This text may be changed.
Out definition	Output activity algorithm may be selected from scrolled menu, see (Fig. 33): **CTRL/SMS/DIAL –** output will be possible to control via SMS message, short call or commutation via selected input. This algorithm is possible to use: for ignition blocking, for gate control or for remoter starting of a car etc. **SIREN** – output used for connection of siren. Used for generating of voice signal after occurrence of alarm. **BUZER** – sound signaling device. Upon alarm of the zone beeps continuously. When security system starts calculating Exit time “Exit Delay”, the user is able to hear short voice signals. When 10 seconds are left till the activation, signals are being repeated each 0.5 seconds.

	If after expiry of delay time all zones remains unalarmed, the system turns into ARM state along with conformation beep. **ARM State** – state of alarm system ARM/DISARM. For light indication may be used. When the output is set for operation in pulse mode, this feature may be used to close car windows or roof ventilation. Impulse time should be set 20-30 seconds. When the security system will be turn on, the output will generate signal to close windows. **Inputs OK** - if any of zones is disturbed, the output will be alarmed. This feature is usually used for indication whether all zones are in order. **Light Flash** – used for connection of light signal. Upon alarm of the security system the light starts blinking. Lights will also blink when activating/deactivating the security system. This feature may be applied to connect car direction signals.
Out pulse time	It is time in seconds, which indicates duration of impulse, when **Pulse** type is being selected in the column **[State Mode]**
Invert	Option to invert the output. If the checkbox is to be checked, the output will work as inverted.
State mode	Output commutation type, see.(Fig. 34). **Pulse** – the output will work in single pulse mode. Pulse time (seconds) should be set in [**Out pulse time**] column. **Steady** – output will work on the steady level till the next commutation.

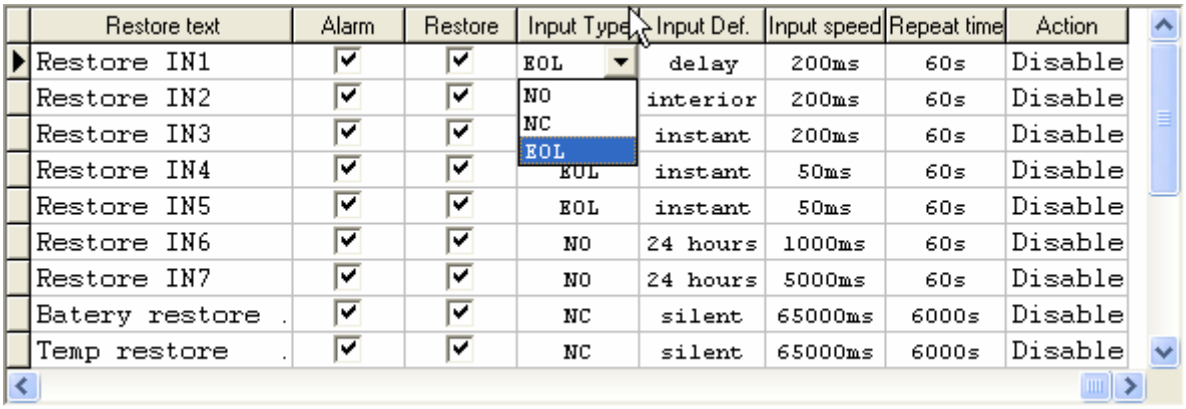
5.6. Window "Inputs"

In order to open Window **"Inputs",** it is necessary to select „Inputs"(Fig. 27) from the left section. All input parameters are being described in this window.



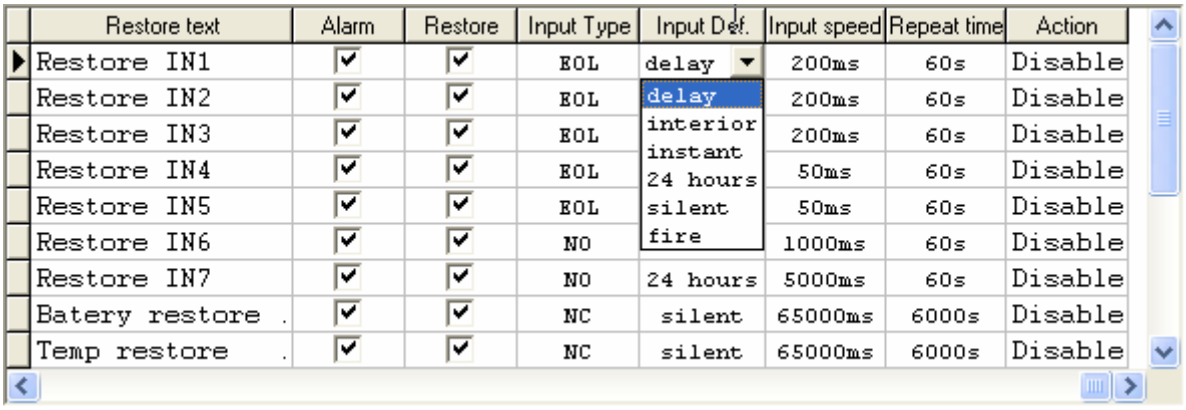
In	Input Name	Alarm text	Restore text	Alarm	Restore	Input Type	
1	Input 1	Alarm IN1	Restore IN1	☑	☑	EOL	
2	Input 2	Alarm IN2	Restore IN2	☑	☑	EOL	ir
3	Input 3	Alarm IN3	Restore IN3	☑	☑	EOL	i:
4	Input 4	Alarm IN4	Restore IN4	☑	☑	EOL	i:
5	Input 5	Alarm IN5	Restore IN5	☑	☑	EOL	i:
6	Input 6	Alarm IN6	Restore IN6	☑	☑	NO	24
7	Input 7	Alarm IN7	Restore IN7	☑	☑	NO	24
8	Battery	Low Batery	Batery restore	☑	☑	NC	s
9	Temperature	Low Temperature	Temp restore	☑	☑	NC	s

Fig. 35



Restore text	Alarm	Restore	Input Type	Input Def.	Input speed	Repeat time	Action
Restore IN1	☑	☑	EOL	delay	200ms	60s	Disable
Restore IN2	☑	☑	NO	interior	200ms	60s	Disable
Restore IN3	☑	☑	NC	instant	200ms	60s	Disable
Restore IN4	☑	☑	EOL	instant	50ms	60s	Disable
Restore IN5	☑	☑	EOL	instant	50ms	60s	Disable
Restore IN6	☑	☑	NO	24 hours	1000ms	60s	Disable
Restore IN7	☑	☑	NO	24 hours	5000ms	60s	Disable
Batery restore	☑	☑	NC	silent	65000ms	6000s	Disable
Temp restore	☑	☑	NC	silent	65000ms	6000s	Disable

Fig. 36



Restore text	Alarm	Restore	Input Type	Input Def.	Input speed	Repeat time	Action
Restore IN1	☑	☑	EOL	delay	200ms	60s	Disable
Restore IN2	☑	☑	EOL	delay	200ms	60s	Disable
Restore IN3	☑	☑	EOL	interior	200ms	60s	Disable
Restore IN4	☑	☑	EOL	instant	50ms	60s	Disable
Restore IN5	☑	☑	EOL	24 hours	50ms	60s	Disable
Restore IN6	☑	☑	NO	silent	1000ms	60s	Disable
Restore IN7	☑	☑	NO	fire	5000ms	60s	Disable
Batery restore	☑	☑	NC	silent	65000ms	6000s	Disable
Temp restore	☑	☑	NC	silent	65000ms	6000s	Disable

Fig. 37

Explanation of fields of"**Inputs**" Window:

In	Input number
Input Name	Input name
Alarm text	It is the text, which will be received by a user after alarm response of appropriate sensor. This text may be changed.
Restore text	It is the text, which will be received by a user after restore

	of appropriate sensor. This text may be changed.
Alarm	If the box is checked it means that the module will react towards alarm response of appropriate sensor. If the box is not checked the module will not react towards alarm of the present input.
Restore	If the checkbox is checked it means that the module will react towards restore of appropriate sensor after alarm response. If the checkbox is not checked the module will not react towards restore of the present input.
Input Type	Input type you may select after scrolling menu (Fig. 36): • **NC** – normally closed contact; • **NO** – normally open contact; • **EOL** -normally closed with end of resistor
Input Def.	Input operation type you may select after scrolling menu: (Fig. 37): • **Delay** – Access zone. Set "Entry delay" and "Exit Delay" are applied for this zone. Such type zones are used for connection of door sensor. • **Interior** – disturbance of this type of the zone will not be responded if alarm of "Delay" type zone occurred and "Entry Delay" or "Exit Delay" time still have not expired. Such type zones may be used for connection of motion sensor in front of the door. The input will be activated immediately if the door has not been open before. • **Instant** – Instant zone. Upon disturbance of this zone, the system will immediately activate burglary alarm. If the security system was ARM'ed. • **24 hours** - Upon disturbance of this zone, the system will activate burglary alarm not depending whether the security system is ARM or DISARM. The applications of this type zones are safes, storehouses, tampers of the sensors. • **Silent** - silent zone is always active not depending on whether the security system is ARM or DISARM. Upon disturbance of this zone, SMS messages are being generated but the siren will not be activated. These zones may be applied for voltage, temperature control, AC mains failure control and for alarm of silent panic. • **Fire** - this zone is always active not depending on whether the security system is ARM or DISARM. The zone generates a special siren signal with interruptions. The zone is applied for smoke sensors and for fire alarm.
Input speed	It is the time in milliseconds, which indicates the shortest signal for reaction of the module. If signal is shorter than indicated, the module will ignore it.
Repeat time	The time period in seconds, during this time repeatable zone events are ignored.
Input 6 (Fig. 38.)	**Blocks ARM Enable function (special function)** If the checkbox is checked. When this input blocks forced ARMing function will not go to ARM mode then input 7 input will be activated.
Input 7 (Fig. 39.)	**In7 forced ARMing (special function)** • **Enable function** – if the module is in DISARM state, thus after selecting the present function, the module will go to ARM mode after alarm response of Input 7 (siren) zone. • **Input Signal time to force ARM** - it is time in seconds, indicating the time of input to be active forced ARM.
Battery (Fig. 40)	**In8 Low Battery parameters** • **Alarm voltage** – it is voltage value of zone Alarm.

	• **Restore voltage** – it is voltage value of zone Restore. • **Calibration** – coefficient, if changed helps to calibration voltage values.
Temperature (Fig. 41.)	**In9 Temperature parameters** • **Alarm temperature –** when this temperature will be reached 9 zone will be alarmed. • **Restore temperature** – when this temperature will be reached 9 zone will be restored; • **Additional Calibration** - by changing X and Y coefficients, which influence temperature calculation formula, it is possible to calibrate temperature showings. Attention! In order to change temperature scale (C/F) go to "Main Window", select preferred temperature scale ("Temperature") and after this change send configuration into the module ("Write Device").

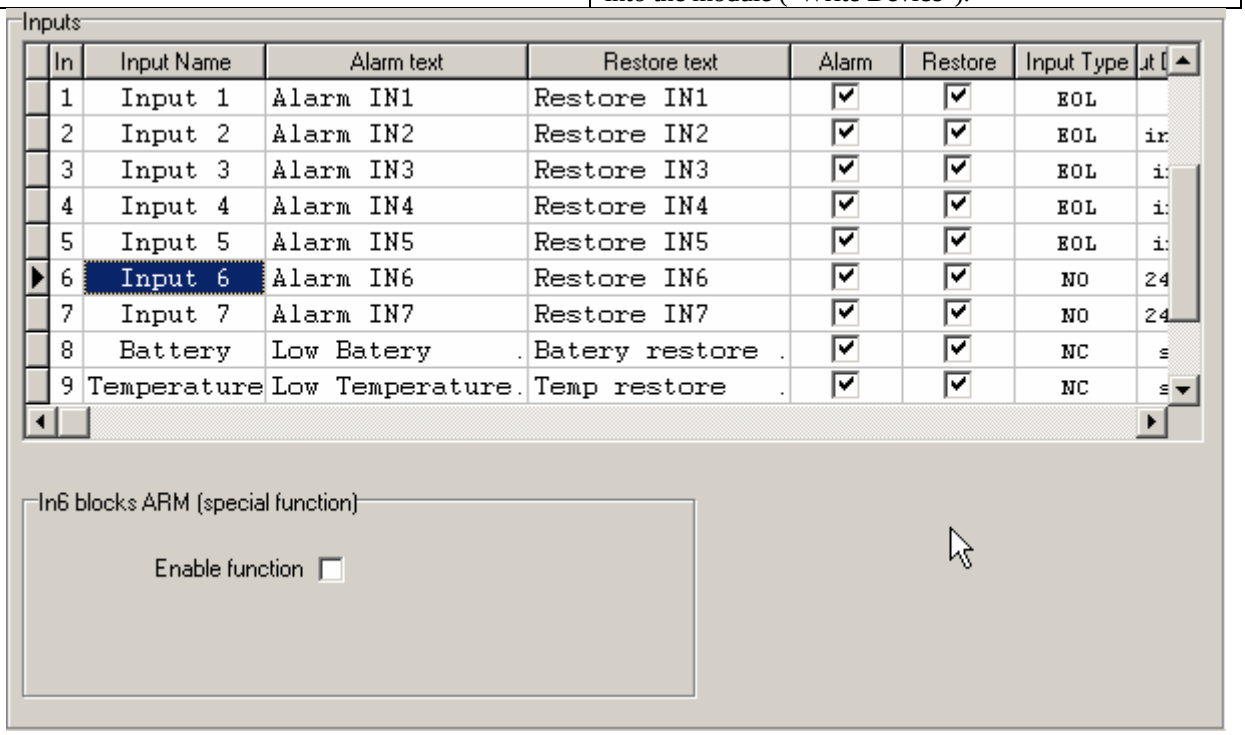


Fig. 38

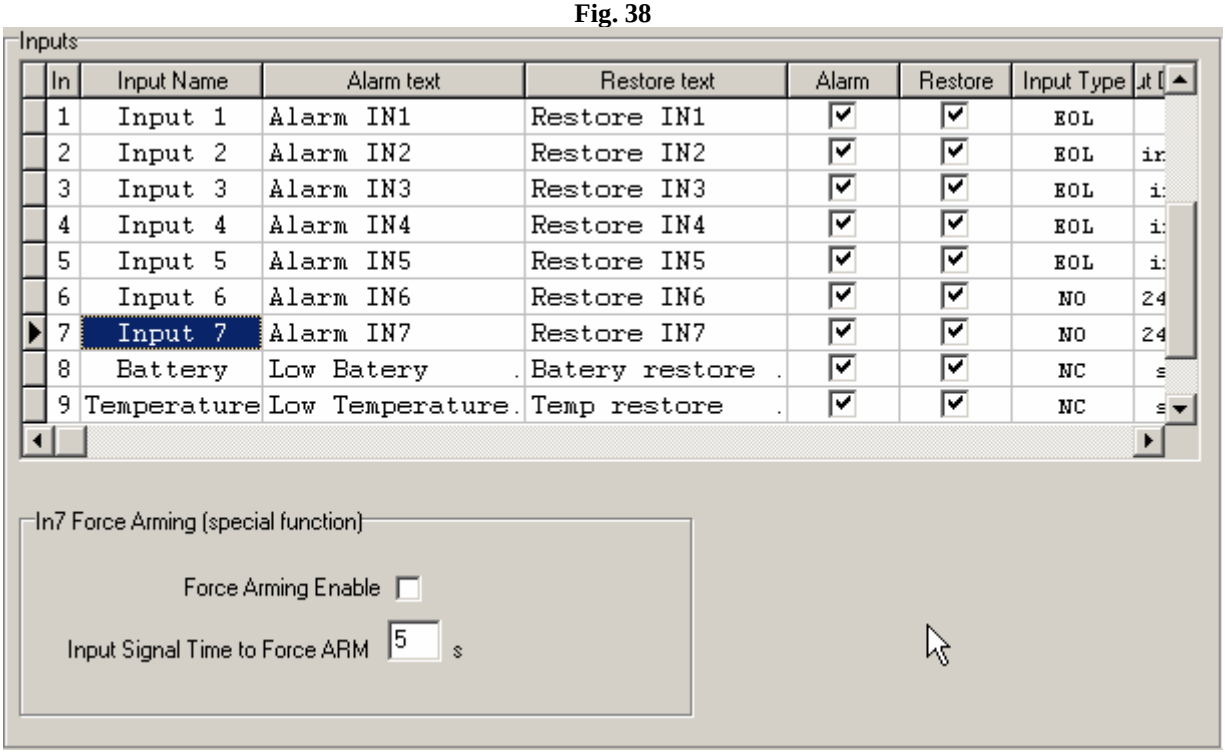


Fig. 39

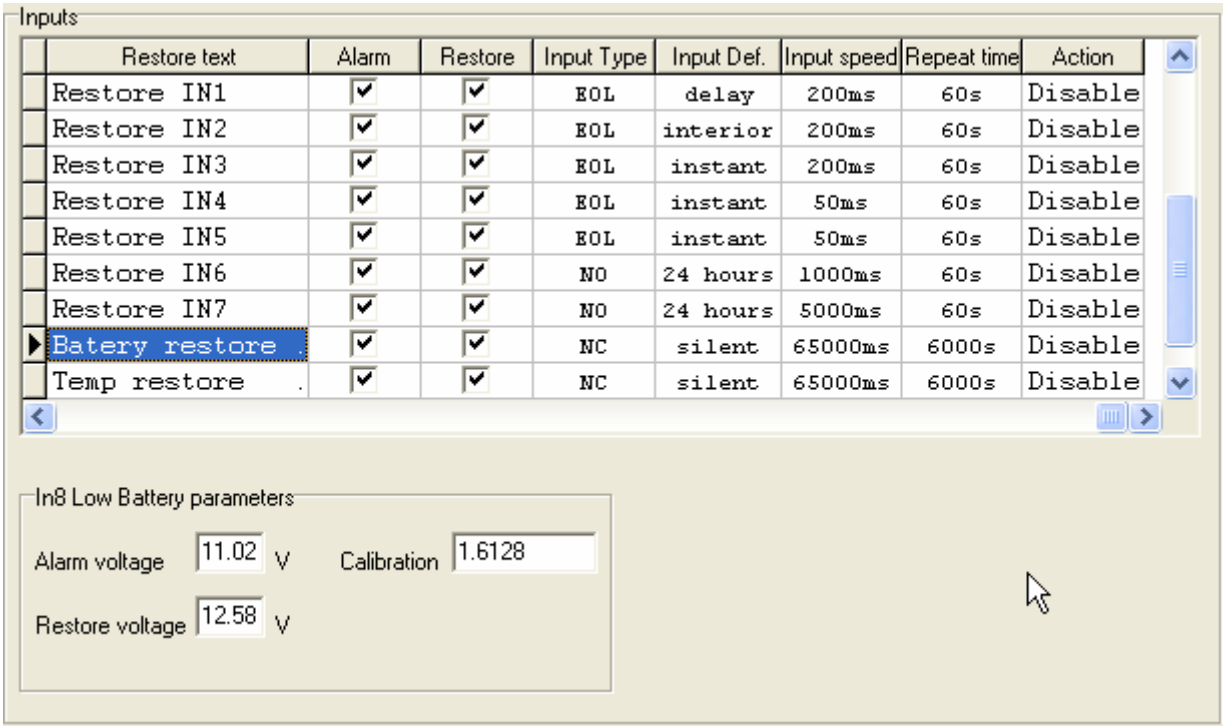

Inputs
Restore text
Alarm
Restore
Input Type
Input Def.
Input speed
Repeat time
Action
Restore IN1 EOL delay 200ms 60s Disable
Restore IN2 EOL interior 200ms 60s Disable
Restore IN3 EOL instant 200ms 60s Disable
Restore IN4 EOL instant 50ms 60s Disable
Restore IN5 EOL instant 50ms 60s Disable
Restore IN6 NO 24 hours 1000ms 60s Disable
Restore IN7 NO 24 hours 5000ms 60s Disable
Batery restore NC silent 65000ms 6000s Disable
Temp restore NC silent 65000ms 6000s Disable
In8 Low Battery parameters
Alarm voltage 11.02 V
Calibration 1.6128
Restore voltage 12.58 V

Fig. 40

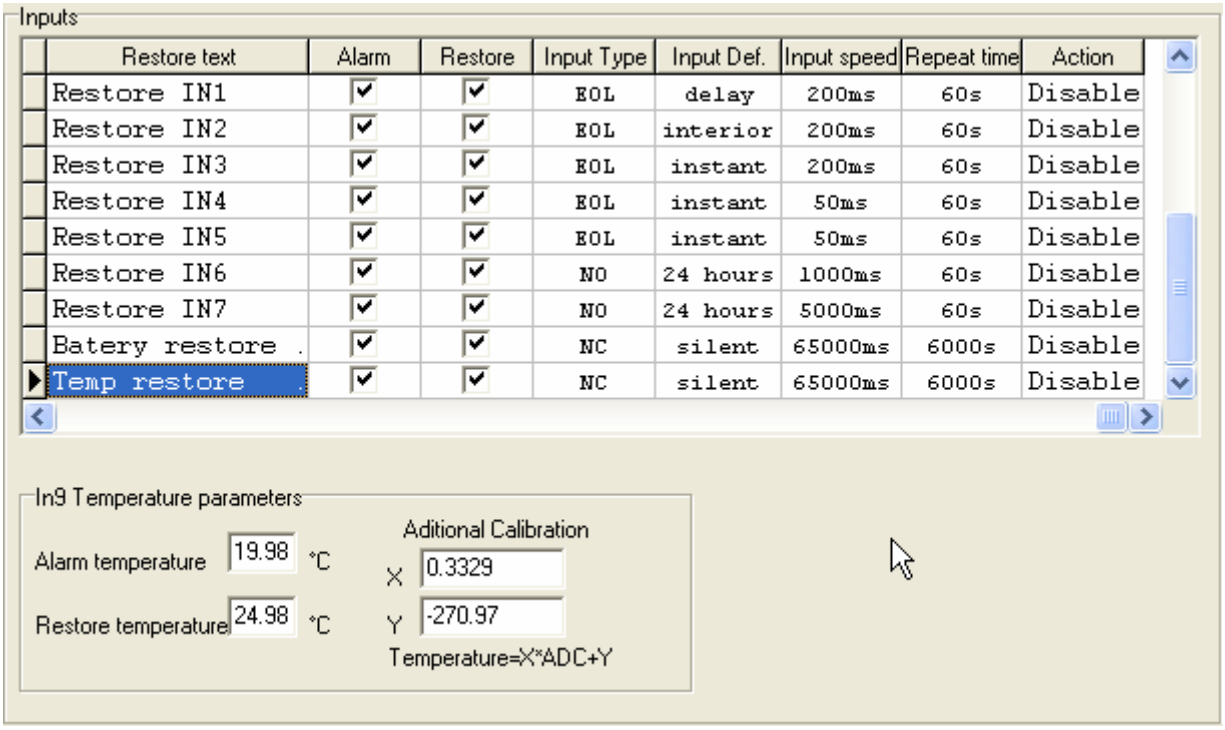

Inputs
Restore text
Alarm
Restore
Input Type
Input Def.
Input speed
Repeat time
Action
Restore IN1 EOL delay 200ms 60s Disable
Restore IN2 EOL interior 200ms 60s Disable
Restore IN3 EOL instant 200ms 60s Disable
Restore IN4 EOL instant 50ms 60s Disable
Restore IN5 EOL instant 50ms 60s Disable
Restore IN6 NO 24 hours 1000ms 60s Disable
Restore IN7 NO 24 hours 5000ms 60s Disable
Batery restore NC silent 65000ms 6000s Disable
Temp restore NC silent 65000ms 6000s Disable
In9 Temperature parameters
Alarm temperature 19.98 °C
Restore temperature 24.98 °C
Aditional Calibration
X 0.3329
Y -270.97
Temperature=X*ADC+Y

Fig. 41

5.7. Window “Service text summary”

In order to open Window select”**Service text summary**“ (Fig. 27) from the left section.

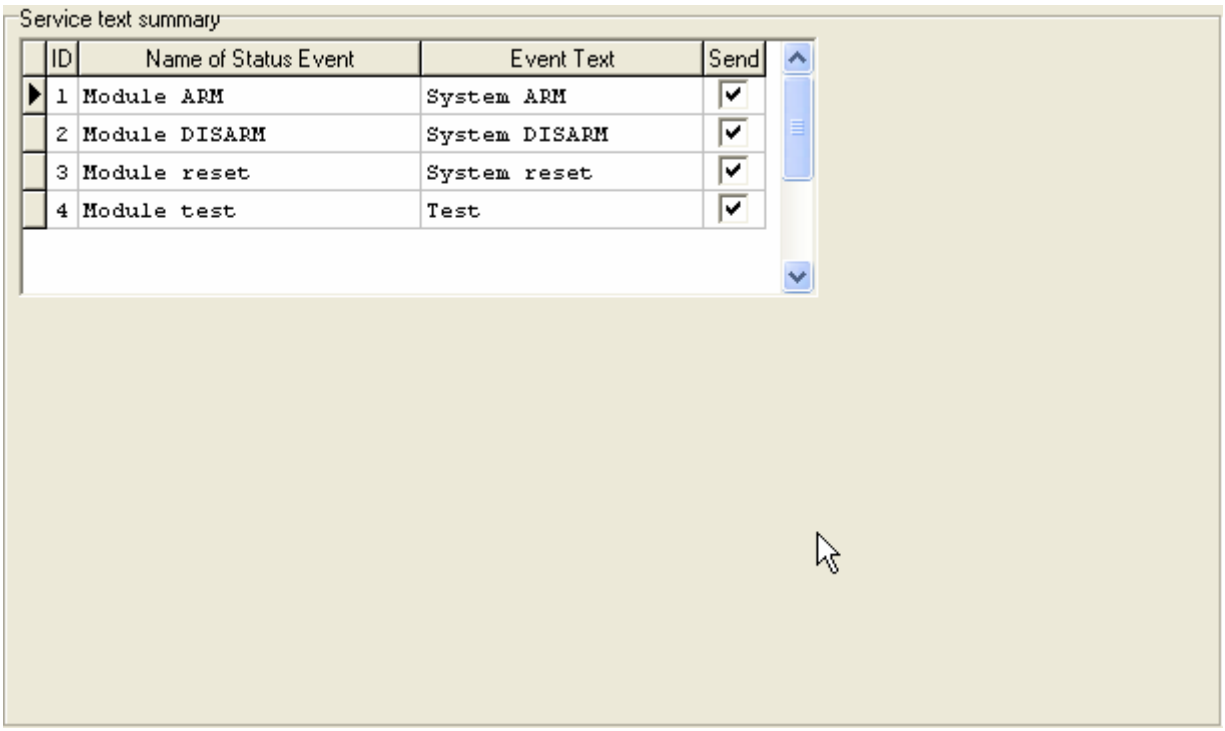


Fig. 42

Explanation of fields of “**Service text summary**” Window:

Name of Status Event	Event name
Event Text	Event test, which may be changed
Send	If checkbox is checked it means that users who are checked in Communications Window near Service SMS will receive message on appropriate event.

5.8. Window “Text summary”

In order to open Window select „**Text table**“ (Fig. 27) from the left side of the Window. This Window is intended for creation of equivalents.

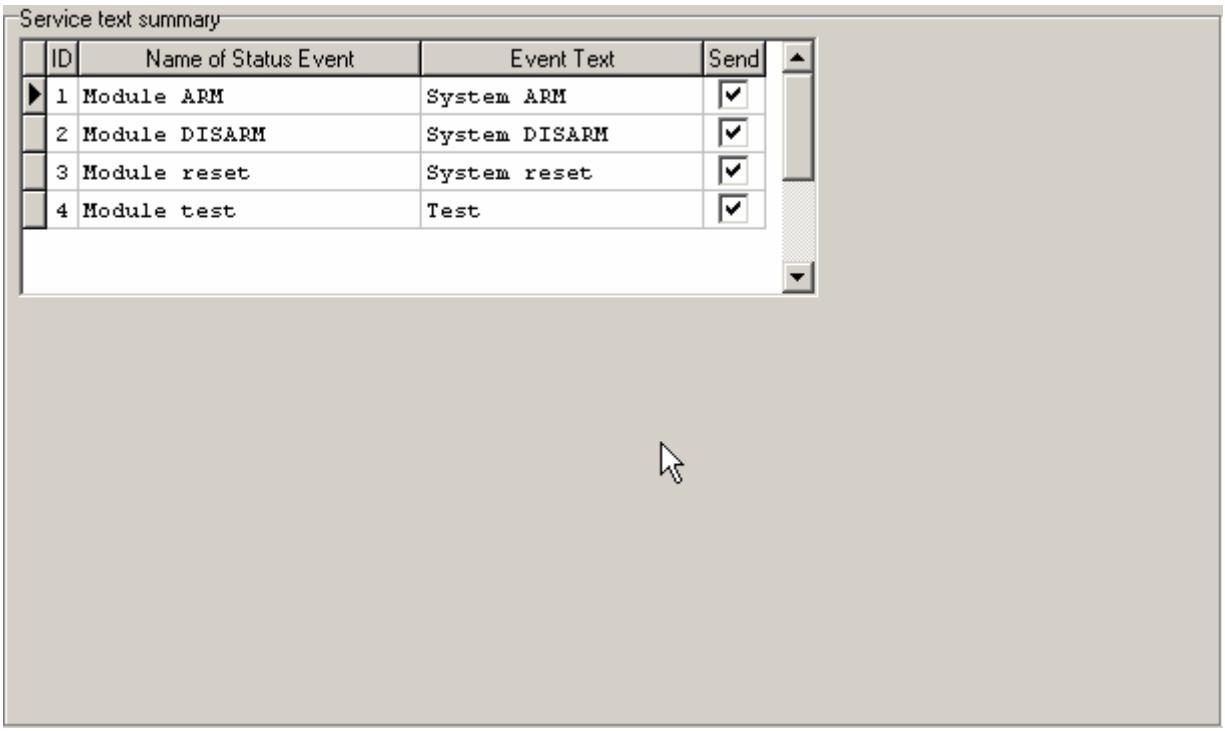


Fig. 43

Explanation of fields of “**Text summary**” Window:

ID	Text number
Text name	Text in English
Text	Equivalent of the text available in „Text name“, which may be changed. Words available in this field will comprise messages being sent.

5.9. Window "Testing and Diagnostic window"

In order to open Window "Testing window", it is necessary to select „Testing" clause (Fig. 27) from the left side. This Window is intended for testing of the module.

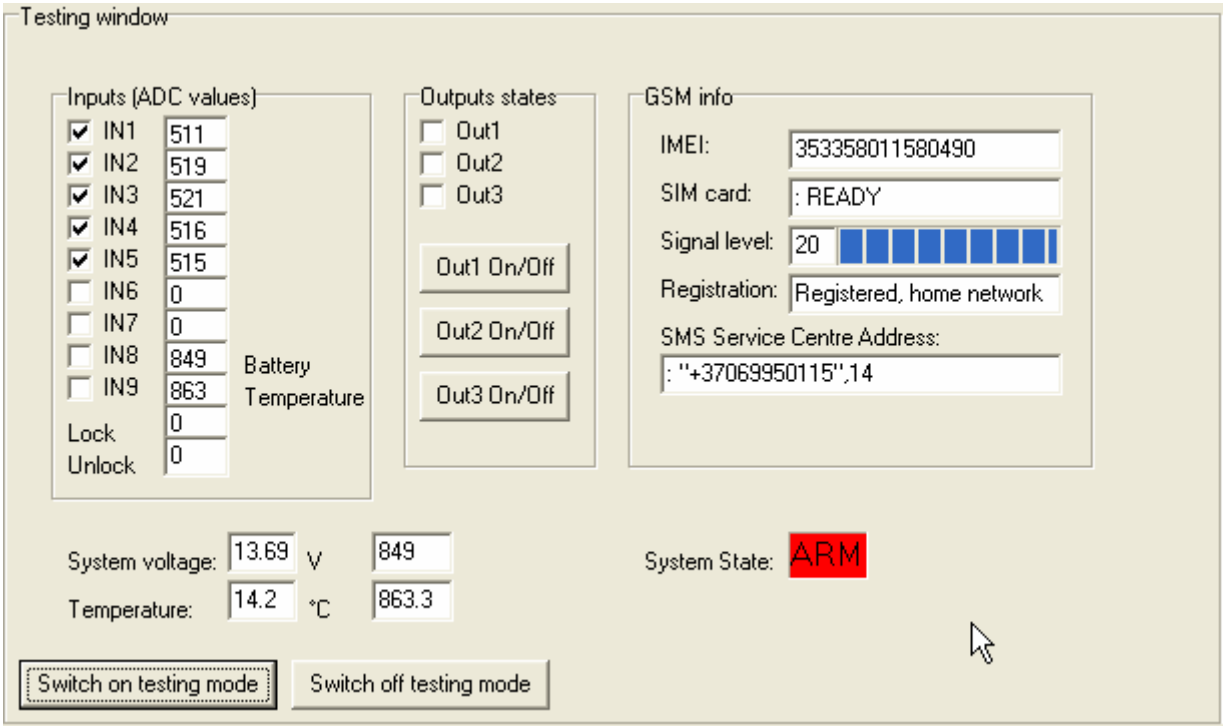


Fig. 44

Explanation of fields of "Testing Window":

Inputs	**IN1**	This is alarm indication of each of eight inputs. Checked checkbox near appropriate input means that this input – zone was activated. Number near each input is a ADC coefficient indicating voltage available in the input.
	IN2	
	IN3	
	IN4	
	IN5	
	IN6	
	IN7	
	IN8	
	Lock	Input indication. Number nearby is a ADC coefficient indicating voltage available in the input.
	Unlock	Input indication. Number nearby is a ADC coefficient indicating voltage available in the input.
Outputs states	**Out1**	Checked box near appropriate output means that this output is on.
	Out2	
	Out3	
	Mygtukas Out1 On/Off	By pressing buttons output (on/off) states are being controlled. It is convenient to use when it is necessary to test outputs operation.
	Mygtukas Out2 On/Off	
	Mygtukas Out3 On/Off	
GSM info	**IMEI**	IMEI number of GSM modem available in the module.
	SIM card	If note "READY" is visible, it means that SIM card is fully functioning. Otherwise, check whether PIN code request is off or replace SIM card.
	Signal level	Signal strength of GSM communication.
	Registration	State of GSM modem registration to GSM network.

	SMS Service Centre Address	SMS center number. This number should be checked if it correct. If this number is incorrect. SMS messaging may be impossible. This number may be changed after inserting SIM card into any mobile phone.
System voltage	Power supply voltage the module is connected to. Nearby number is value of ADC voltage. When multiplying this number by the coefficient available in IN8 window (Fig. 40), voltage value will be achieved.	
Temperature	Temperature of temperature sensor. The number nearby is temperature ADC value used to calculate temperature according to the formula: Temperature=X*ADC+Y. X and Y coefficients may be changed in temperature window in order to additionally calibrate temperature measuring. These coefficients see (Fig. 41). After performing additional calibration, it is possible to achieve precise temperature measurement.	
System State	**ARM**	Indication that at the moment the module is in **ARM** state.
	DISARM	Indication that at the moment the module is in **DISARM** state.
	WAITING ARM	Module state when **Exit Delay** time is being calculated.
Switch on testing mode	Pressing this button starts testing of the module.	
Switch off testing mode	Pressing this button stops testing of the module.	

6. Saving of GTAUTO module configuration into PC

After configuration of the module, all settings may be saved at PC. It enables to save time, when next time the same configuration will be used – it will not be necessary again to set the same parameters.

If you want to save that is already recorded in the module, firstly you must read configuration of the module. [File>Read Device] see (Fig. 45) In order to save configuration go to [File>Save As...] (Fig. 46) or press icon „Save“ (Fig. 47). Enter configuration parameter in the displayed table and press „OK“.

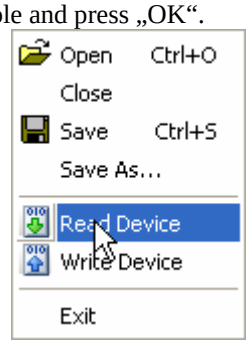


Fig. 45

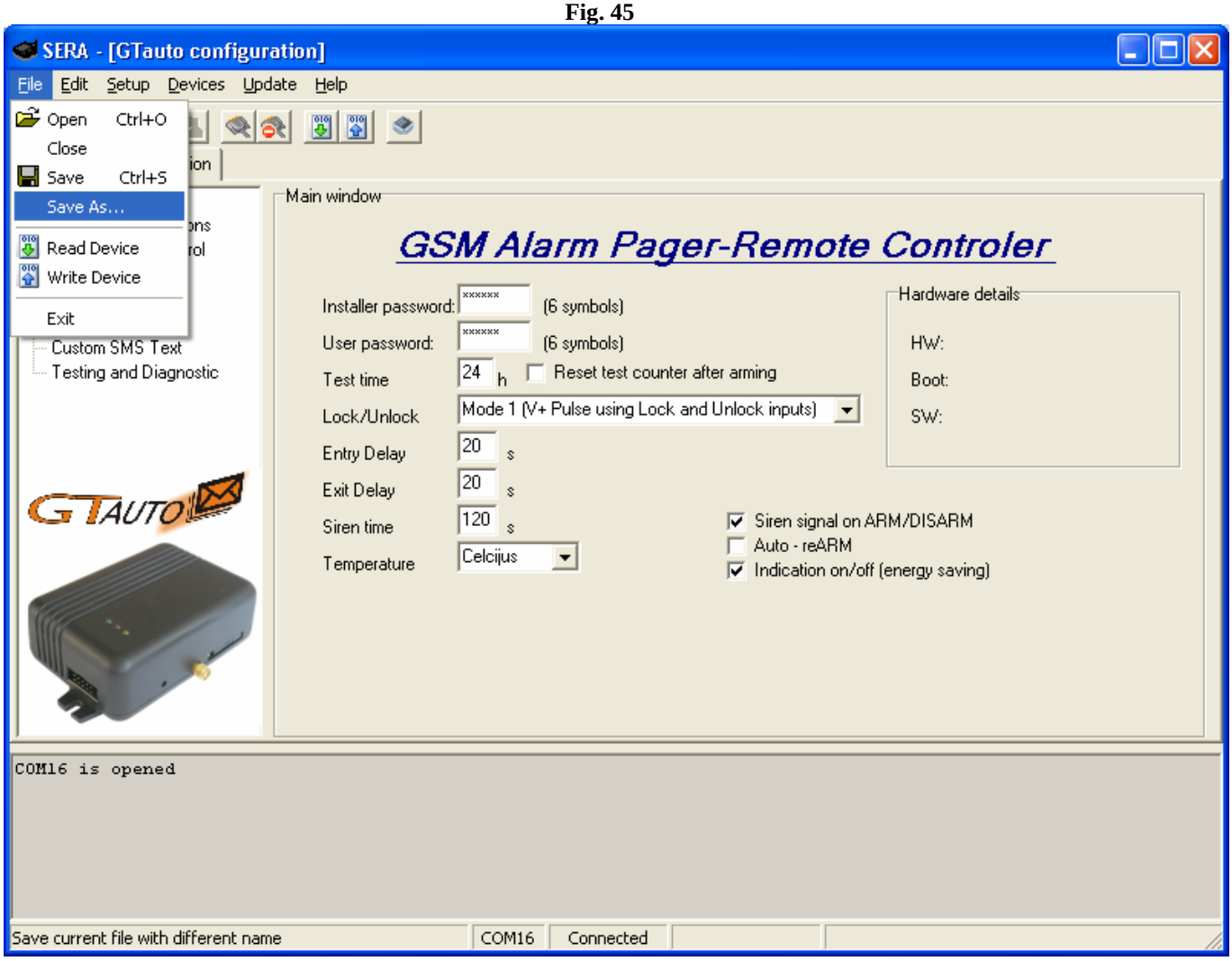


Fig. 46

Fig. 47

7. Installing of saved configuration into the module GTAUTO

In order to start saved configuration go to [File>Open] (Fig. 48) or press „Open“ icon (Fig. 49).

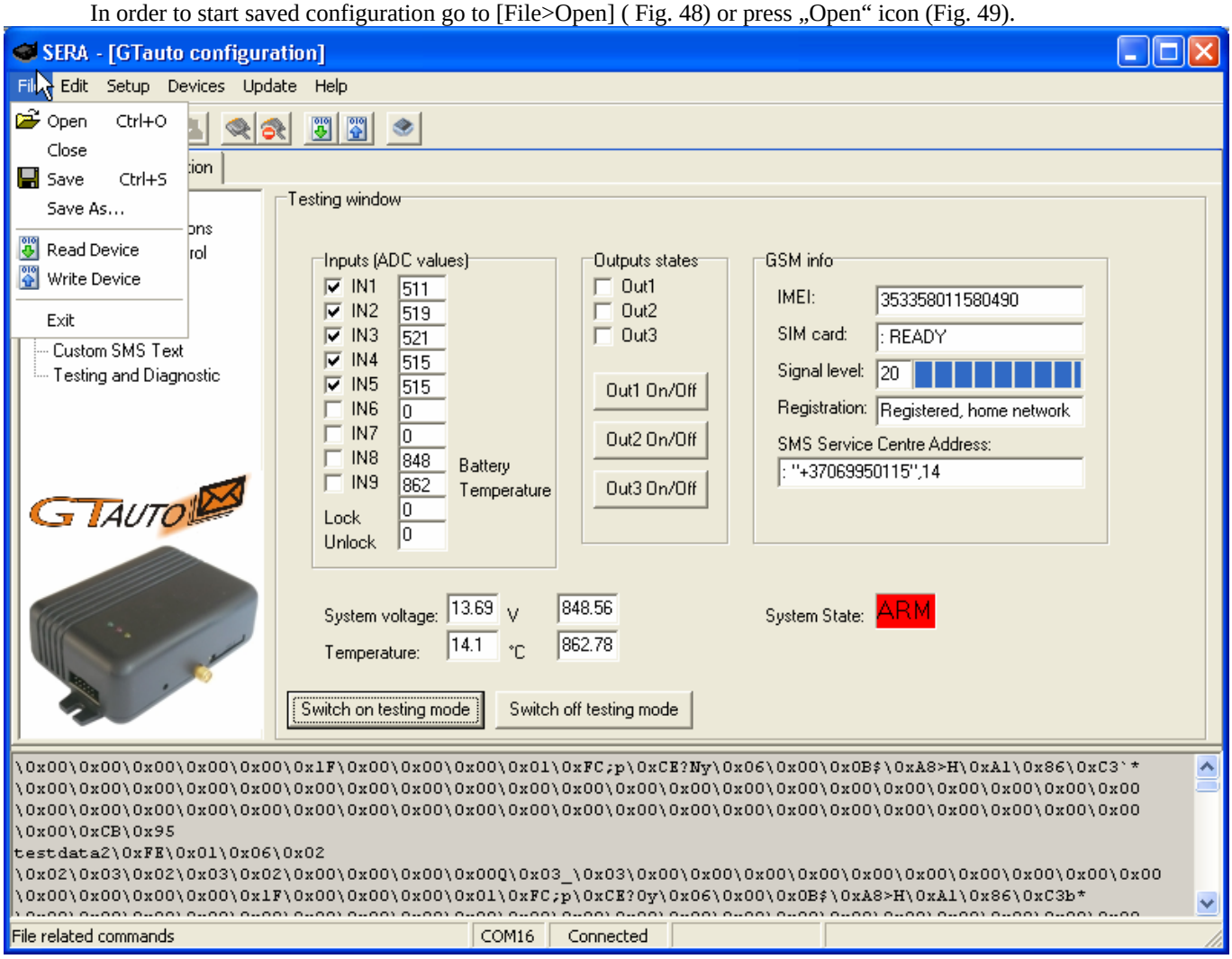


Fig. 48

Fig. 49

Fig. 50

Click the file of saved configuration or press “Open” in displayed Window. Now all parameters of saved configuration have been loaded into application SERA. If no any other necessary changes press [File >Write Device] (Fig. 50) in order to send this configuration into the module.

8. Updating of GTAUTO software version

The latest software version may be found www.topkodas.lt. If version of your module is older, please update it (to find out the version of your GTAUTO software version (SW) send Test SMS from your module).

For this purpose press „Update“ see Fig. 51 or „Update module“ icon, Fig. 52. Specify the file of the newest software version and press „Open“. Follow instructions.

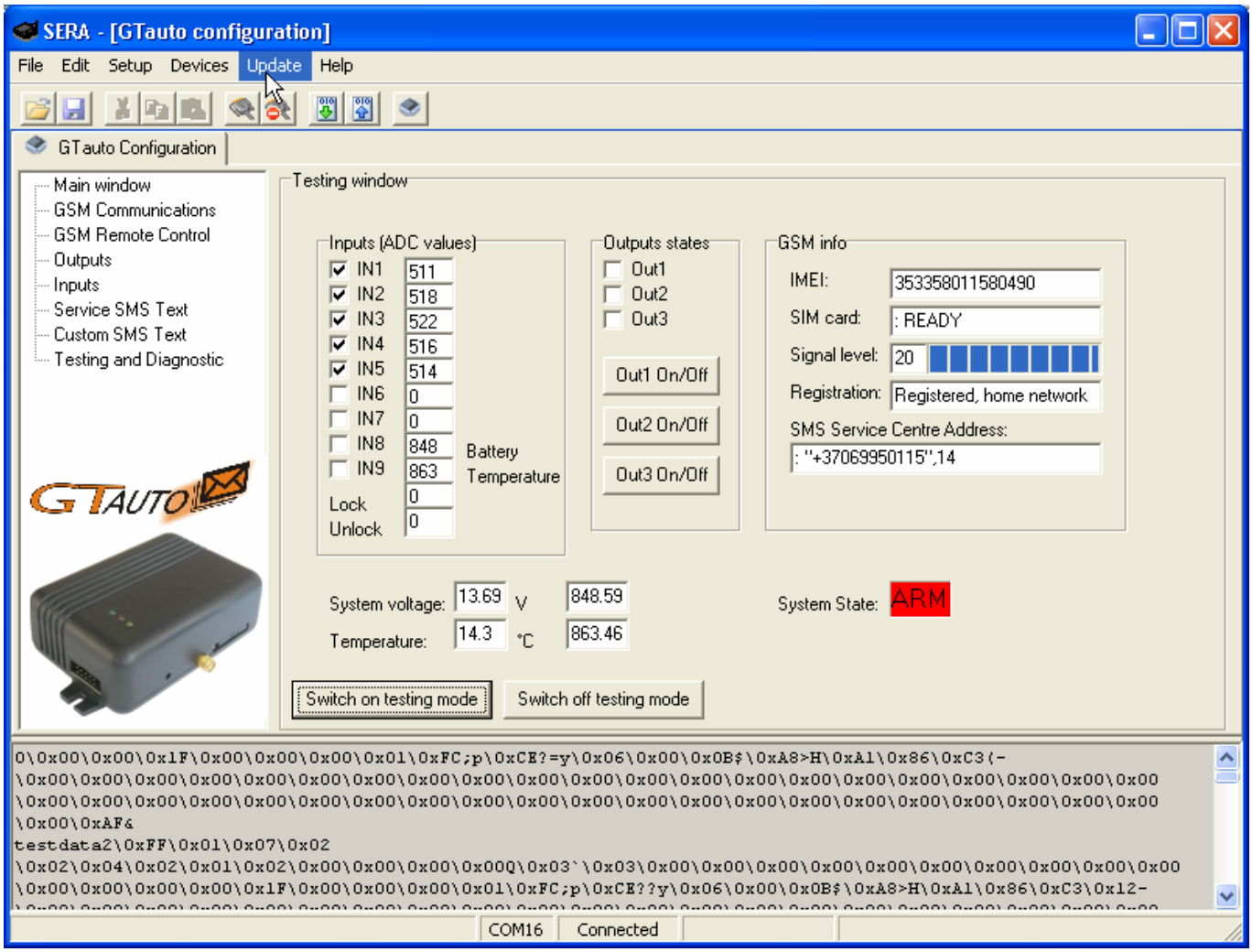
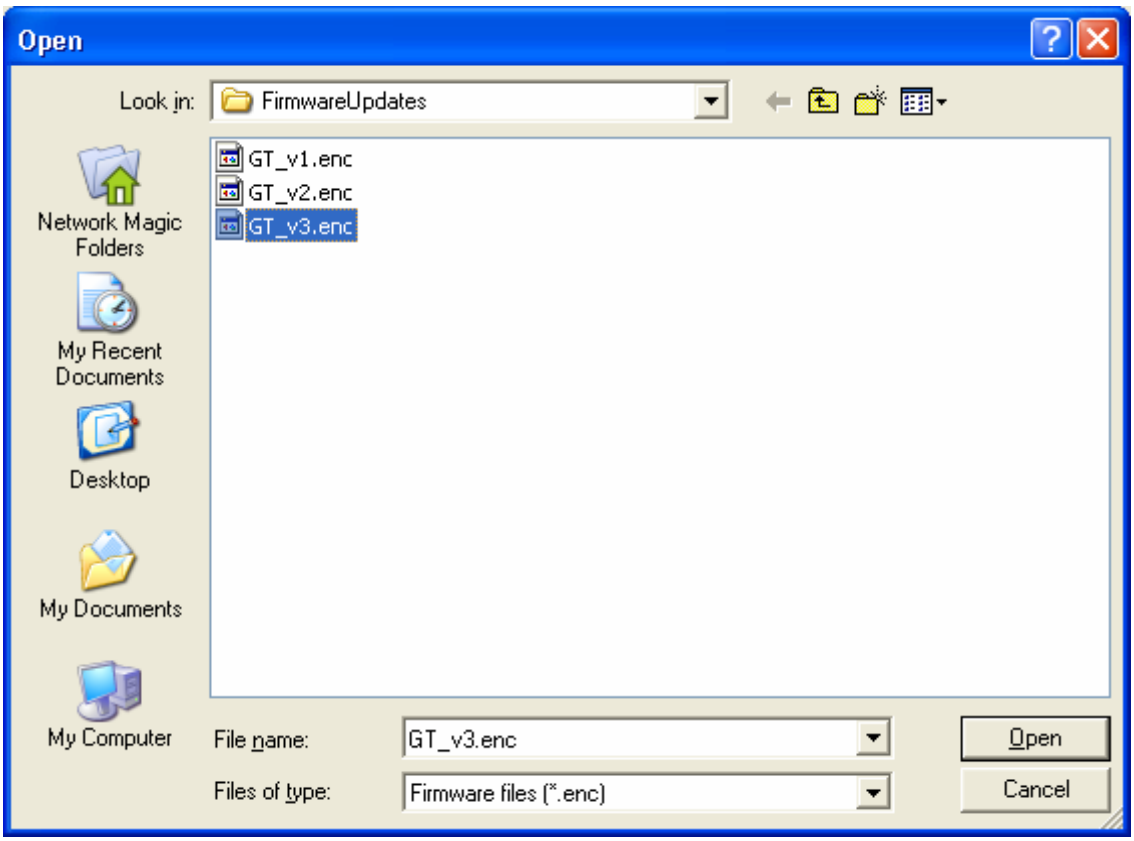


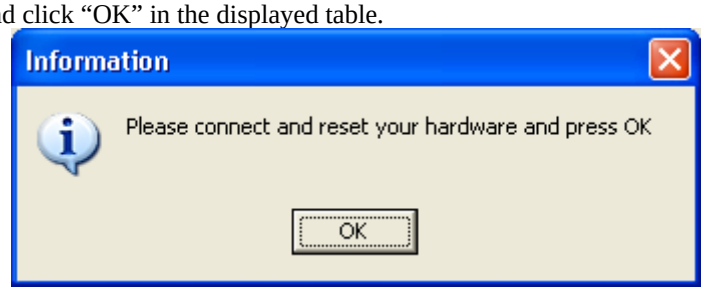
Fig. 51

Fig. 52

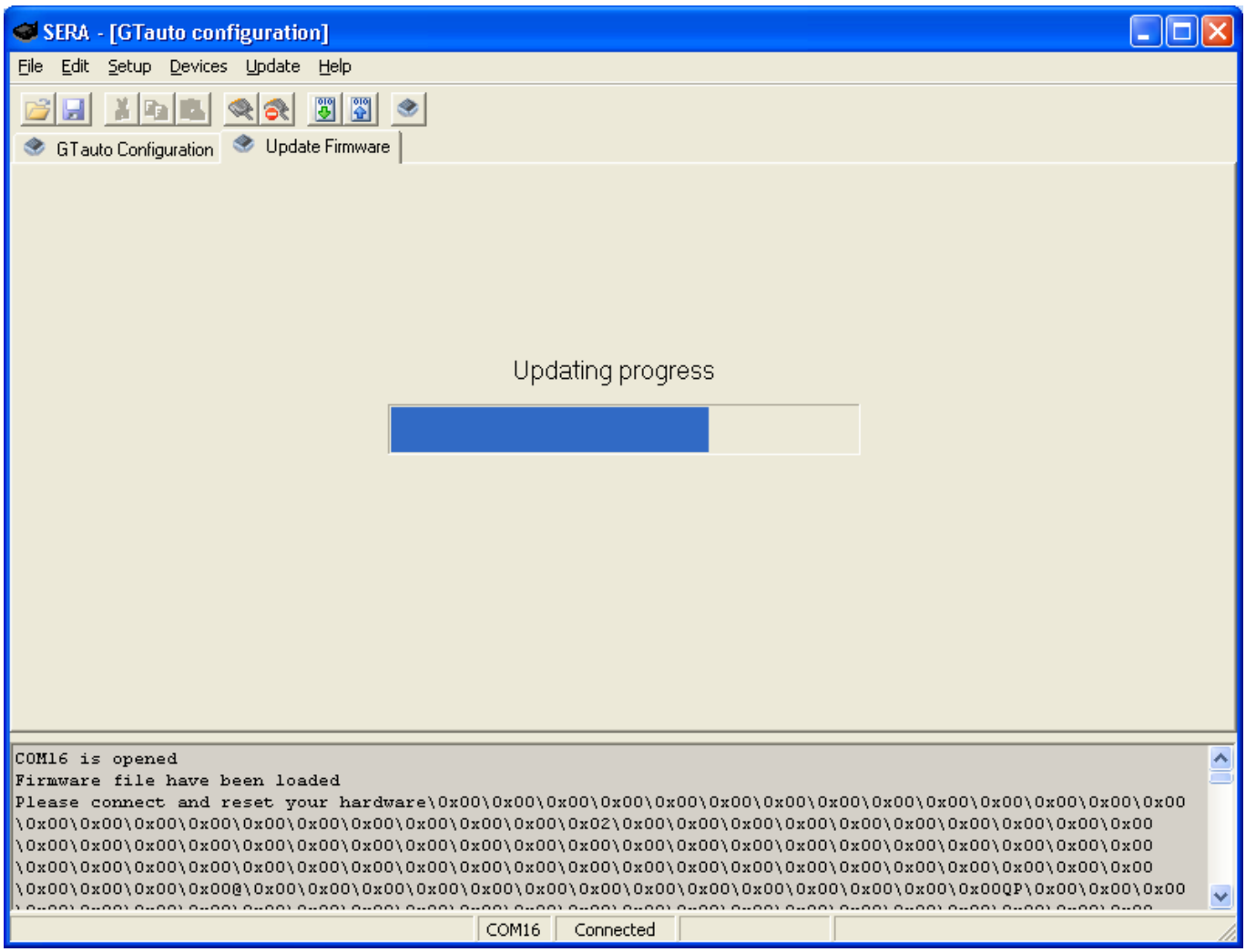
Select Firmware file of the module:



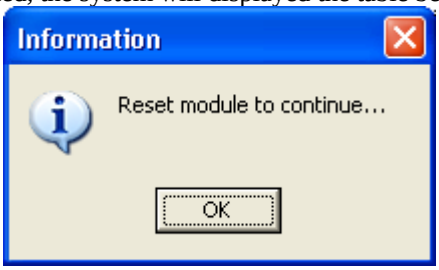
Press RESET button once and click “OK” in the displayed table.



The following window will be displayed:

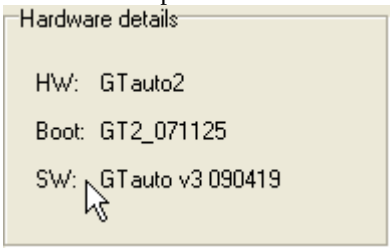


When updating of firmware will be finished, the system will displayed the table below:



Then press RESET button. Then press OK.

Read configuration of the module [File->Read Device].
Go to Main Window. Check, whether firmware has been updated. **SW: xxxxxxxxx**



Programme version is also visible below: