PC APPLICATION GRM-10

MANUAL INSTRUCTION

DESCRIPTION

The application is used to update the software of the GRM-10 device and its configuration by means of a PC. In order to perform all the above activities it is necessary to connect the GRM-10 device with a computer (PC) by means of a USB Micro B / USB A cable.

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APPLICATION APPEARANCE

MAIN WINDOW - PARAMETERS SECTION

The window is used to configure the basic GRM-10 controller parameters (a password to control the text message, confirmations, MODBUS communication parameters, IN1 / IN2 inputs configuration, OUT1 / OUT2 outputs configuration).

A section of configuration parameters adjustment.

A section of software update.

Configuration block.
Passwords to text messages.
Confirmations.

A configuration block of transmission parameters.

Input configuration block.

Blok konfiguracji wyjść.

MAIN WINDOW - TELEPHONE SECTION

The window is used to configure the telephone numbers, which have the access authorisation to control the GRM-10 device by means of calling signals (CLIP) and authorisations connected with reporting and administration.

The block is used to add a new user's telephone number:
Name / Surname / Number start with +48

Numbers authorised to a remote control.

All telephone numbers.

Telephone numbers authorised to control CLIP and to control In the gate mode (GATE) – maximum 500 numbers.

Telephone numbers that will receive the confirmations.

MAIN WINDOW - EXTA FREE SECTION

The window is used to configure commends controlling the EXTA FREE system receivers.

Edition of commands / Sending commands (programming).

Numbers of buttons.

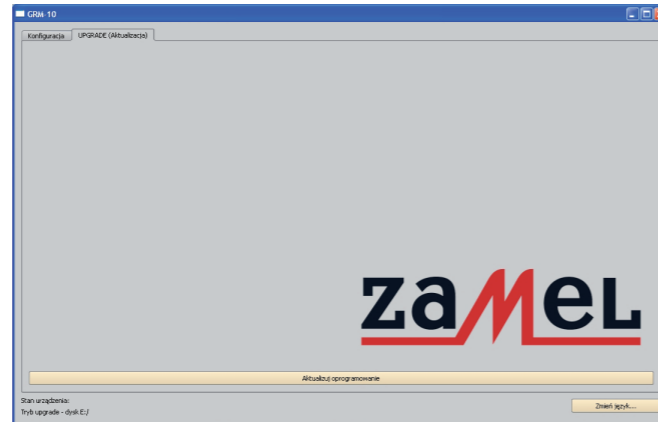The block is used to add a new command controlling the EXTA FREE system receivers.

Control commands.
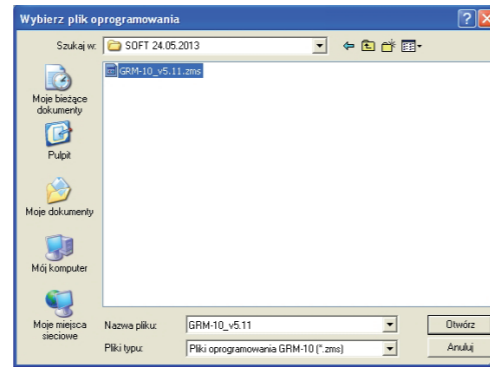
SOFTWARE UPGRADE

The upgrade can be done by a GRM-10 device user and it is necessary to do it after the latest upgrade version release by a producer. Information on current upgrade version can be found on the product site: http://www.zamelcet.com/pl,263,4537,sterownik_gsm_modulowy_2kanalowy_grm10.html.

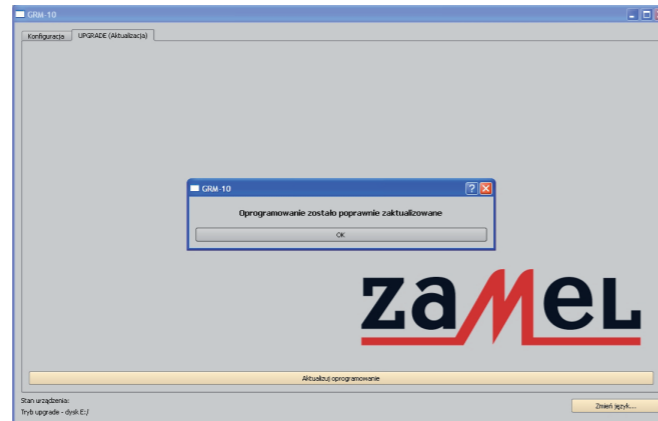In order to upgrade the software, the following steps must be done:
1. After the power supply is switched off, connect the GRM-10 device to the computer (PC) by means of the USB (USB Micro B / USB A) cable and keep pressed the PK2 button.
2. Start the GRM-10 application and choose the UPGRADE section.

3. Choose " Software upgrade" and next from a specified location choose the latest upgrade version for GRM-10 device (file *.zms).
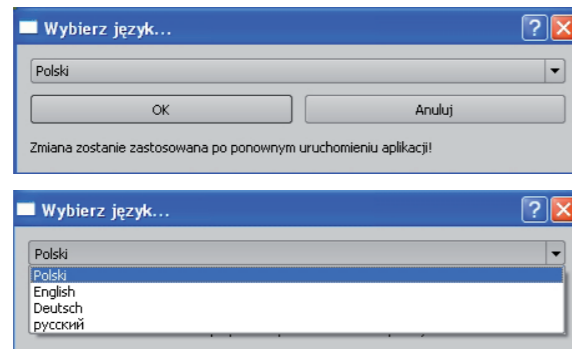
4. If the upgrade is successfully finished, the application will show: " The upgrade was properly updated".
5. Press "OK'.
6. Enter the configuration mode.
7. After a proper device configuration disconnect the USB cable. Next switch on the power supply and check the GSM-10 device proper operation.

LANGUAGE CHANGE

The application to GRM-10 device is prepared in 4 language versions: POLISH, ENGLISH, RUSSIAN and GERMAN.
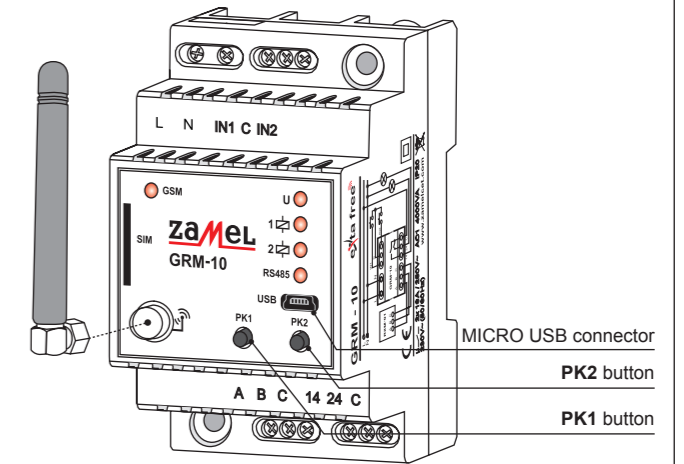In order to change the language the following shall be done:
1. Click " CHANGE LANGUAGE".
2. Choose the proper language from the " Choose language" window and confirm it by pressing the "OK" button.

3. **In order to make some changes, the GRM-10 application must be activated again.**

GRM-10 CONFIGURATION BY MEANS OF THE PC APPLICATION

1. Start the GRM-10 application on a computer (PC).
2. After the power supply switch off, connect the USB Micro B / USB A cable to the GRM-10 device.
3. Wait until GRM-10 is activated in the operative system and properly installed.
4. Make proper configuration adjustments by means of PC.
5. In order to save the current configuration to the GRM-10 device press the" DEVICE SAVING" button.
6. Aftera proper message is displayed, press shortly the PK1 button on the GRM-10 front panel (it is signalled by a short RS485 LED yellow diode switching on).
7. If the configuration is correct, the application will display messages: "CONFIGURATION OK" or otherwise " CONFIGURATIONERROR".
8. Disconnect the USB Micro B / USB A cable from the GRM-10 device.
9. Switch on the power supply and check if the configuration was properly done.

The user has a possibility of archiving configuration adjustments, it means the current configuration adjustments can be saved to a file.

MICRO USB connector
PK2 button
PK1 button

Saving the configurationto the *.zml file
The current configuration can be saved to a "config.zml" file. To do it press the "SAVE TO A FILE" button by means of the application, choose a correct file location and save it. The user has also a possibility to read the current configuration from the *.zml file or directly from the GRM-10 device.
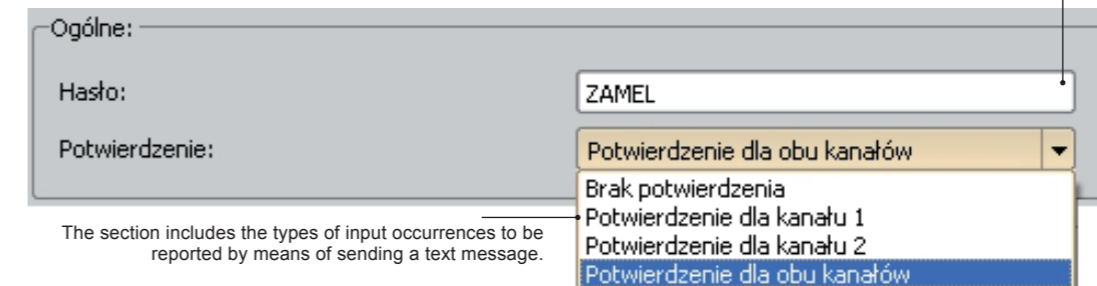
Reading the configuration from the *.zml file
The current configuration can be read from the "config.zml" file. To do it press the "READ FROMA FILE" button by means of the application, choose the proper file location and read it.

Reading the configuration from the GRM-10 device
The current configuration can be directly read from the GRM-10 device. To do it press the "READ FROMTHE DEVICE" button by means of the application.
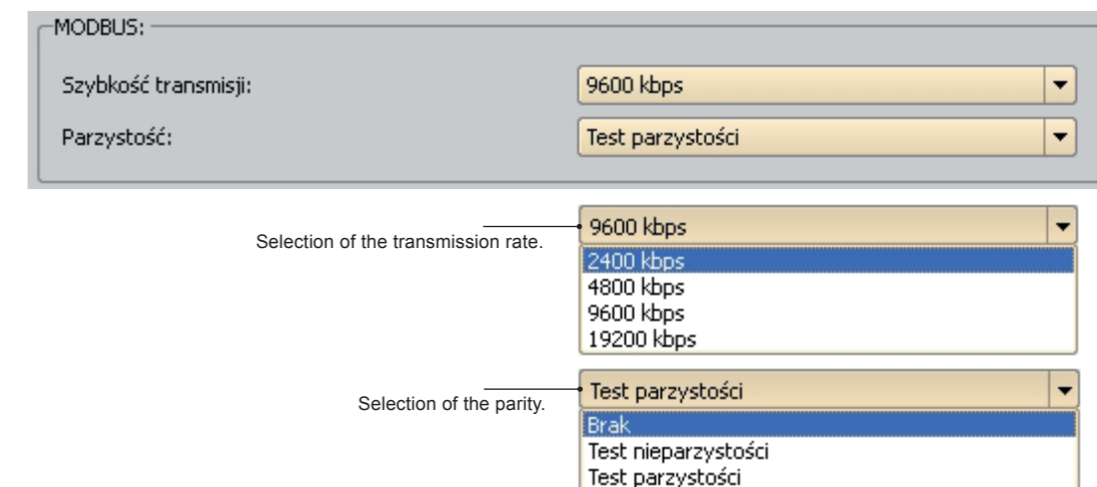
CONFIGURATION OF A PASSWORD AND CONFIRMATIONS

A password limiting the access to control during TEXT MESSAGE control.
During control, it is written before the control TEXT MESSAGE.
Maximum number of signs: 25.

Ogólne:

Hasło: ZAMEL

Potwierdzenie: Potwierdzenie dla obu kanałów

The section includes the types of input occurrences to be reported by means of sending a text message.

Brak potwierdzenia
Potwierdzenie dla kanału 1
Potwierdzenie dla kanału 2
Potwierdzenie dla obu kanałów

CONFIGURATION OF MODBUS COMMUNICATION

MODBUS:

Szybkość transmisji: 9600 kbps

Parzystość: Test parzystości

Selection of the transmission rate.

9600 kbps
2400 kbps
4800 kbps
9600 kbps
19200 kbps

Selection of the parity.

Test parzystości
Brak
Test nieparzystości
Test parzystości

CONFIGURATION OF INPUTS

The text message content (maximum 32 signs).

Wejścia IN1 / IN2:

IN1HI:	Brak ▼	☒ sms	
IN1LO:	Brak ▼	☒ sms	
IN2HI:	Brak ▼	☒ sms	
IN2LO:	Brak ▼	☒ sms	

The logical IN1/IN2 inputs status.

It defines the occurrence that needs to be activated in case a defined status occurs on an input.

Brak ▼
- Brak
- Przekaźnik 1
- Przekaźnik 2

If the option "Relay 1" was chosen or "Relay 2" the user has the following options:

Włączony ▼
- Włączony
- Wyłączony
- Czasowo

SWITCHED ON	The relay is switched on after a defined input status was detected.
SWITCHED OFF	The relay is switched off after a defined input status was detected.
TIME	The relay status is switched on for a specific time after a defined input status was detected.

TIME ADJUSTMENT FOR "TIME" OPTION

Wejścia IN1 / IN2:

IN1HI:	Brak ▼	☒ sms	
IN1LO:	Brak ▼	☒ sms	
IN2HI:	Brak ▼	☒ sms	
IN2LO:	Przekaźnik 1 ▼	Czasowo ▼ 1 ▲▼ ☒ sms	

Time adjustment for the time mode.
Adjustments in the range 0...3600 sec.

TEXT MESSAGE OPTION

Solution 1: after a recorded input occurrence: input activation + a text message with a defined content is sent (the text message is sent to all authorised telephone numbers included in the INFO).

Wejścia IN1 / IN2:

IN1HI:	Brak ▼	☒ sms	
IN1LO:	Brak ▼	☒ sms	
IN2HI:	Brak ▼	☒ sms	
IN2LO:	Przekaźnik 1 ▼	Czasowo ▼ 10 ▲▼ ☒ sms	ZMIANA CZASOWA OUT1

After the "LO" status is detected on the IN2 input, the relay 1 (OUT1) status is changed for time 10 sec. + a text message "OUT1 TIME CHANGE" is sent to all authorised telephone numbers defined in the INFO.

Solution 2: after a recorded input occurrence only a text message with a defined content is sent (the text message is sent to all authorised telephone numbers included in the INFO).

Wejścia IN1 / IN2:

IN1HI:	Brak ▼	☒ sms	
IN1LO:	Brak ▼	☒ sms	
IN2HI:	Brak ▼	☒ sms	
IN2LO:	Brak ▼	☒ sms	STAN NISKI NA IN2

After the "LO status is detected on the IN2 input, a text message including "IN2 LOW STATUS" content is sent to all authorised telephone numbers defined in the INFO.

CONFIGURATION OF OUTPUTS

Tryb załącz/wyłącz ▼
- Tryb załącz/wyłącz
- Tryb czasowy
- Tryb bramowy

Wyjścia:

Tryb sterowania dla kanału 1:	Tryb załącz/wyłącz ▼
Tryb sterowania dla kanału 2:	Tryb załącz/wyłącz ▼
Stan po włączeniu zasilania dla kanału 1:	Włączony ▼
Stan po włączeniu zasilania dla kanału 2:	Włączony ▼
☒ Sterowanie poprzez dzwonienie	
Liczba sygnałów dla kanału 1:	3 ▲▼
Liczba sygnałów dla kanału 2:	3 ▲▼

Operating mode selection.
An independent mode for each output.

A default output status after power supply is switched on / switched off.

Włączony ▼
- Włączony
- Wyłączony
- Poprzedni

A possibility of CLIP control switching on / switching off.

Number of signals to control CLIP. Adjustments from 2 to 12.

SWITCHED ON	After power supply voltage is applied or switched off and then again after power supply voltage is applied, the output remains in the switched on status.
SWITCHED OFF	After power supply voltage is applied or switched off and then again after power supply voltage is applied, the output remains in the switched off status.
PREVIOUS	After power supply voltage is applied or switched off and then again after power supply voltage is applied, the output has the status remembered before power supply voltage was switched off (the parameter is not adjusted for the time mode).

CONFIGURATION OF OUTPUTS IN TIME MODE

Wyjścia:

Tryb sterowania dla kanału 1:	Tryb czasowy ▼
Tryb sterowania dla kanału 2:	Tryb czasowy ▼
Stan po włączeniu zasilania dla kanału 1:	Wyłączony ▼
Stan po włączeniu zasilania dla kanału 2:	Wyłączony ▼
Czas dla kanału 1 [s]:	10 ▲▼
Czas dla kanału 2 [s]:	20 ▲▼
☒ Sterowanie poprzez dzwonienie	
Liczba sygnałów dla kanału 1:	3 ▲▼
Liczba sygnałów dla kanału 2:	2 ▲▼

Defines time change of the status for channel 1. Adjusted in the range from 0 to 3600 sec.

Defines time change of the status for channel 2. Adjustments in the range from 0 to 3600 sec.

CONFIGURATION OF OUTPUTS IN GATE MODE

Wyjścia:

Tryb sterowania dla kanału 1:	Tryb bramowy ▼
Tryb sterowania dla kanału 2:	Tryb bramowy ▼
Stan po włączeniu zasilania dla kanału 1:	Wyłączony ▼
Stan po włączeniu zasilania dla kanału 2:	Wyłączony ▼
Czas dla kanału 1 [s]:	1 ▲▼
Czas dla kanału 2 [s]:	10 ▲▼
☐ Tryb automatyczny	
☒ Sterowanie poprzez dzwonienie	
Liczba sygnałów dla obu kanałów:	2 ▲▼

Defines the pulse duration time to the gate controller. Adjustments in the range from 0 to 10 sec.

Defines the gate electric latch switch on time. Adjustments in the range from 0 to 60 sec.

Number of signals during CLIP control. Adjustments in the range from 2 to 6 sec.

Automatic mode selection.

Wyjścia:

Tryb sterowania dla kanału 1:	Tryb bramowy ▼
Tryb sterowania dla kanału 2:	Tryb bramowy ▼
Stan po włączeniu zasilania dla kanału 1:	Wyłączony ▼
Stan po włączeniu zasilania dla kanału 2:	Wyłączony ▼
Czas dla kanału 1 [s]:	1 ▲▼
Czas dla kanału 2 [s]:	10 ▲▼
☒ Tryb automatyczny	
Czas dla trybu automatycznego [s]:	60 ▲▼
☒ Sterowanie poprzez dzwonienie	
Liczba sygnałów dla obu kanałów:	2 ▲▼

Time for automatic mode. Adjustments in the range from 1 to 600 sec.

ADDING TELEPHONES BY MEANS OF PC APPLICATION

In order to add a new telephone number to the BASE the following shall be done:

1. Write NAME and SURNAME and the telephone number starting with +48xxxxxxxxx, and next press the ADD button.

2. The number is added to the TELEPHONE BASE.

3. In order to move a chosen number to CLIP, ADMIN or INFO section, first highlight the chosen number in the base and then click the proper button " Add to CLIP", 'Add to INFO" or "Add to ADMIN'.

he numbers included in the CLIP section are authorised to control the CLIP, it means they control by means of sending a defined number of calling signals to GRM-10 device. It refers to switch on / switch off , time and gate modes.

All numbers added to the INFO section will receive messages referring to occurrences on outputs and IN1 / IN2 inputs (if confirmations are adjusted).

All numbers added to the ADMIN section are authorised to switch the GRM-10 device into or out of a remote configuration mode. The remote configuration is possible during normal device operation without the need to switch off the power supply.

ADDING CONTROL COMMANDS FOR EXTA FREE SYSTEM

In order to add a command controlling the EXTA FREE system receivers the following shall be done:

1. Enter the control command (freely defined by the user) and add to it the numbers of buttons to control the EXTA FREE system. The numbers of buttons can be included in the range from 1 to 127. Maximum 15 buttons can be added to one control command (it is used in a simultaneous control of several receivers).

2. Press the ADD button - the command is added to the list of control commands. **In this way the maximum 127 control commands can be created**.

The control of EXTA FREE system receivers by means of the GRM-10 device is only possible after its connection with the RXM-01 translator (www.extafree.pl) through the RS-485 interface and an appropriate configuration of transmission parameters. Additionally, in the application, it is required to perform the programming of buttons' numbers that are related to particular control commands to the appropriate EXTA FREE system receivers.

In order to do it, in the application, tick the SEND option and adjust correct transmission parameters (the number of the communication port, transmission rate and parity).

The programming process of receivers by means of an application is analogous to programming typical EXTA FREE system transmitters. After control commands had been defined, a table was created and it should be used as a multi push-button remote control. For example, when the cursor stops on the button 1 code, it is highlighted blue. Pressing this button is analogous to a wireless sending of a code to press button 1. By pressing it, the button's colour changes into orange.

During programming, the RXM-01 device must be connected to the computer. In order to do it a proper adapter USB-RS232 or USB-RS485 must be used.

During normal operation, for example, sending a text message with the „LIVING ROOM ON" content to the GRM-10 device will result in switching on the receiver with an assigned number 1.