INSTRUCTION MANUAL

TOP+ Control

Computer program

Manufacturer:

POL-EKO-APARATURA sp.j.

Ver. 1.71

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Symbols in the manual

	This symbol indicates helpful tips.

1 DESCRIPTION

TOP+ enables connecting to Ethernet, which makes it possible to control the device remotely.

	It is possible to control the device over the Internet, but it requires port forwarding at the gateway – ask your IT department for details.

To control the device you can use EasyLab or TOP+ Control computer programs made by POL-EKO-APARATURA.

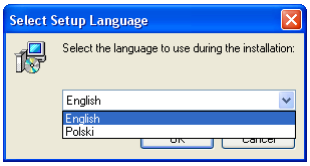
1.1. TOP+ Control system requirements

Below is a minimum specification of a computer where you can install TOP+ Control:

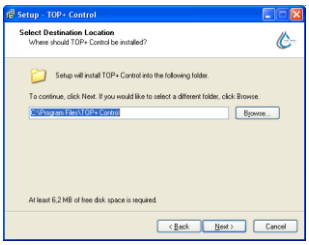
- Windows Vista / 7 / 8 operating system,
- at least 50 MB of available disk space on HDD,
- minimum screen resolution 1024x768 16-bit, recommended 1280x1024 32-bit,
- LAN network card,
- NET Framework 3.5 installed (available to download from www.microsoft.com).

2 PROGRAM INSTALLATION

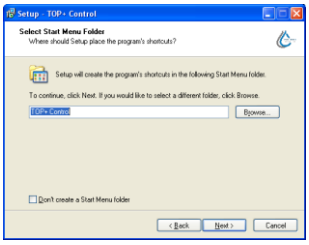
- The program may be downloaded from www.pol-eko.com.pl



- To start the installation, run “Setup.exe”.
- Confirm that you want to run the program and select the language of the installation procedure



- Select the location to install the software using the “**Browse**” button or accept the default location by pressing **“Next >”.**
- If the target folder does not exist, the program will ask if it should be created. Press “Yes”.



- Now select the Start Menu folder in which shortcuts to TOP+ Control should be created. You can skip creating shortcuts in the Start Menu by checking “*Don't create a Start Menu folder*” at the bottom of the installation window. When you select the folder or accept the default folder, press “**Next >**”.
- Then you will be asked whether you want to create shortcuts on your desktop.
- The installation will begin when you click “**Install**”.

- You can start the program using shortcuts created during the installation.

2.1. Connecting the unit to a PC or a network

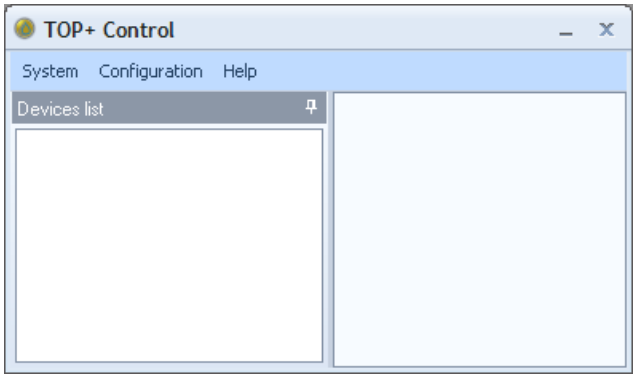
A TOP+ unit can be controlled with the *TOP+ control* program manufactured by POL-EKO-APARATURA. It's required to connect the unit to an existing LAN network, or to a PC, which the software is installed on, using a 100Base-TX Ethernet cable, known as a *twisted-pair cable.* The default IP address of the unit is **192.168.1.210**.

If you connect the unit to a LAN network, use an inverted network cable and set the correct IP address, subnet mask and ports in the control panel of the unit.

If you connect the unit to a PC network card directly, the IP address of the PC should be in the range 192.168.1.1 – 192.168.1.209, so it is within the same subnet like the unit.

2.2. Starting the program

You need to set up network parameters in the device before the first run of the program. You must also create User accounts for all those who will use the device, using the Administrator account.

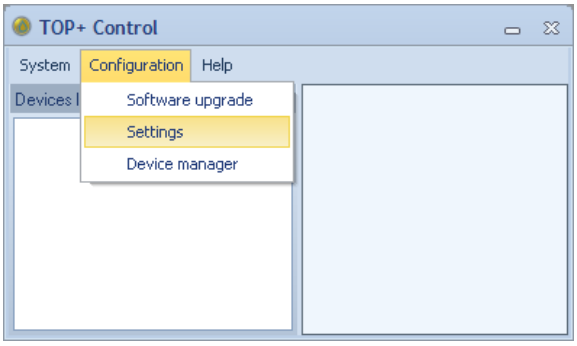


A welcome screen will appear when you start the program.

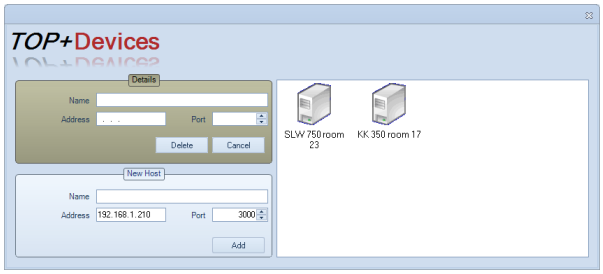
Default language is English.

2.2.1. Change language

There you can select the language in which you will run the program. To change the language, choose **Configuration/Settings.**



2.2.2. Managing devices



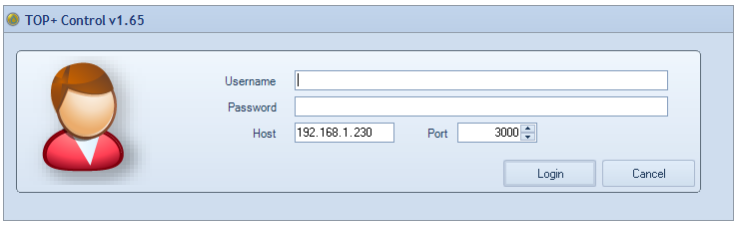
You can add all the TOP+ devices that you use and save them in the **Devices list**.

To add a new device, go to **Configuration/Device manager.** In the New Host field enter the device's IP addres and port (these settings must be the same in the device). You can also edit the device's name. To remove the device from the list, press **Delete.**

2.2.3. Logging in

Double click on a device to log in. If a device is no on the list, in the menu select **System/Log in.**

A new window will open (see below), where you can enter the device's IP address (host), port, user name and password.



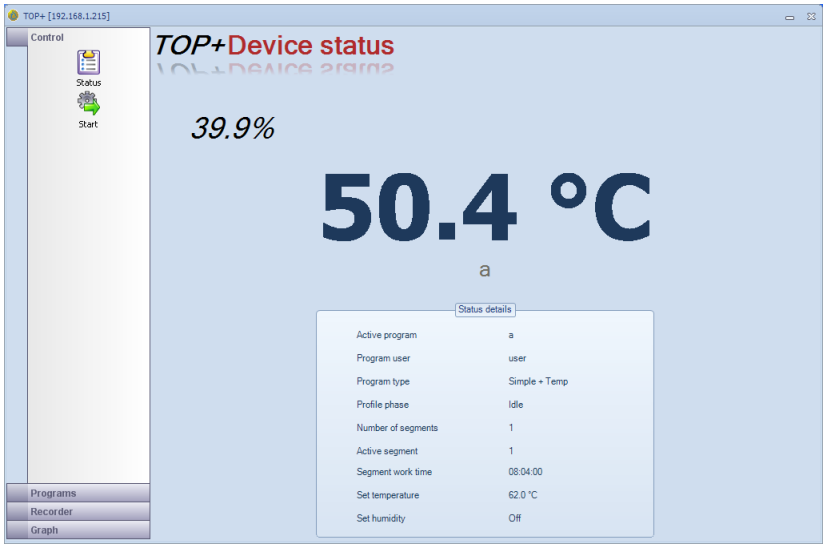
Having filled in all the fields, you can log in to the device by pressing "**Login**".

Depending on the user account type (Administrator or User), different options are available.

3 OPERATING THE PROGRAM AS USER

The window of the program available for User account is made up of two main parts: The left side of the screen displays a menu divided into four groups:

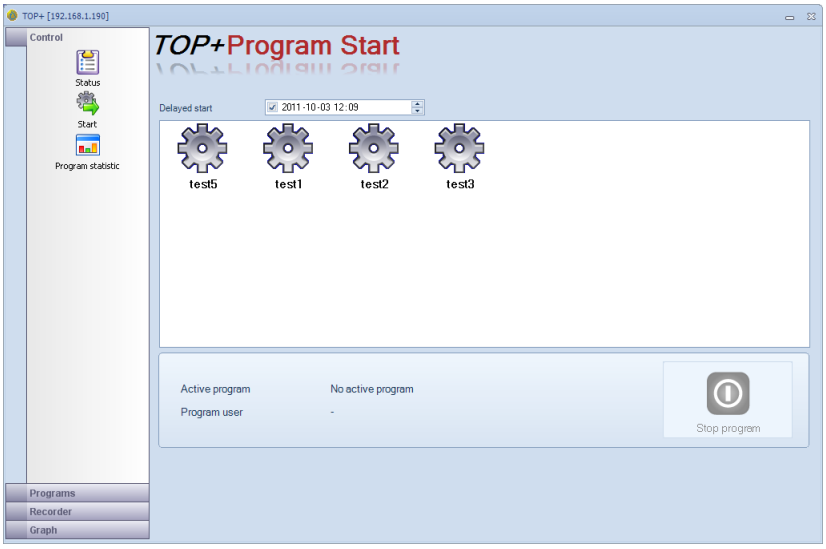
- Control
- Programs
- Recorder
- Graph



The right side of the window changes depending on the option selected in the menu.

3.1. Control

In the Control menu there are 2 windows available:



- Status – the window displays information about the current state of the device. If no program is running, the display shows temperature and relative humidity (option) inside the chamber and also 2nd sensor temperature reading(if extra temperature sensor has been provided)

If there is a program in operation there is additionally a box with detailed data on the current state of the device and the running program.

- Start – used to start stored programs and stop programs previously started. If you double-click the icon of a program, you will be asked whether you want to start it. Click "**Yes**" to confirm.

It is not possible to run a new program if another program is already running. First you need to stop the active program by pressing .

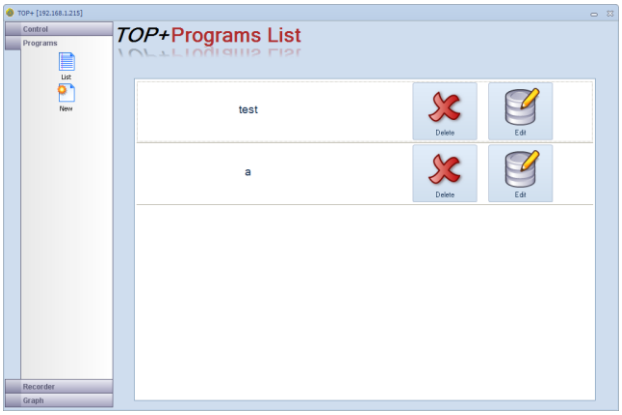
	A program can only be stopped by the User who started it (described as the program's User).

The **delayed start** parameter determines date and time of launching the program. To use this function, do the following: activate this parameter, set date and time of launching the program. Then select the program by double left-clicking the program icon .

- Program statistic – statistics data on the program; recorded min, average and max measured values

3.2. Programs

Programs screen is used to edit programs available for the User.

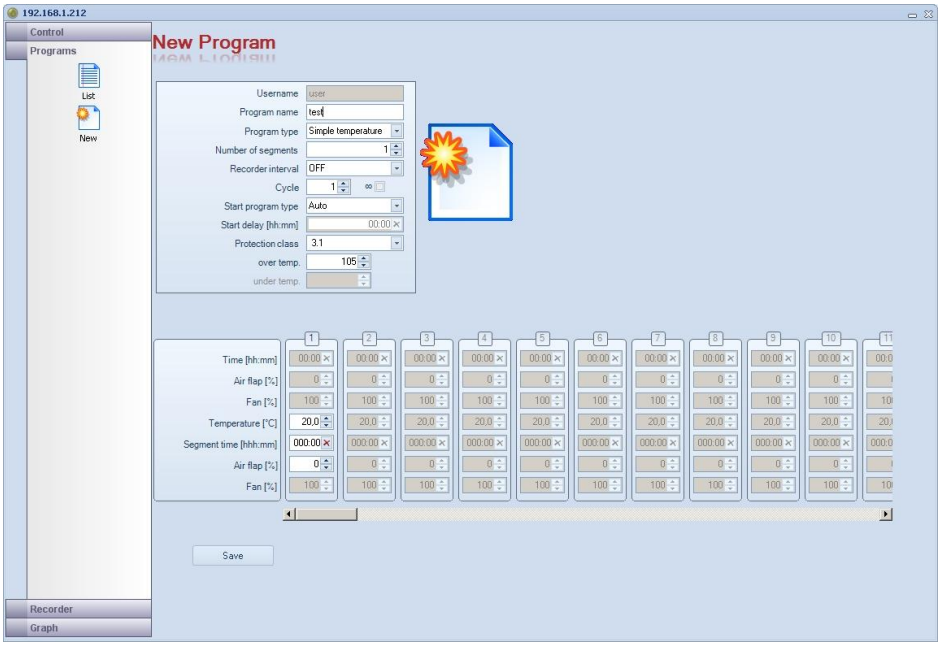


- List – list of all programs available for the User. Here you can edit a program by pressing the button located next to its name. You'll then see the program editing screen. You can also delete a program by pressing the button.

- New - starts the program editing screen.

	It is not possible to add a new program if the maximum number of programs for the User have been created. To increase the number of programs you need to ask the administrator of the device.

An example program editing screen is shown on the right.

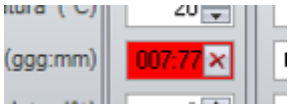


You can save up to 9 segments.

Program parameters have been described in instruction manual for TOP+ devices.

You can change the parameters using the buttons located next to the edited field.

The button is available next to the time editing fields. It is used to reset the value in the field.

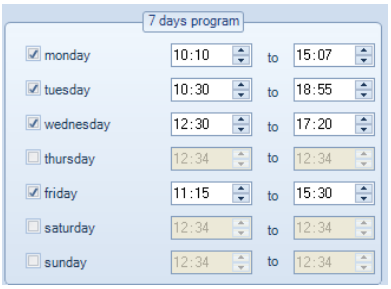


In case an incorrect value is inputted, the edited field is highlighted in red. The same happens when no *Program name* is inputted when adding a new program.

Before saving the program the field will be highlighted in red, making it impossible to save the program.

Having set up all the parameters you can save the program by pressing "**Save**".

7-day program window is available after choosing this function in **Start program type** parameter.

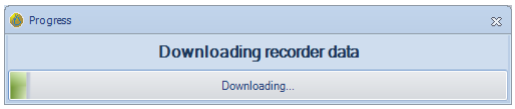


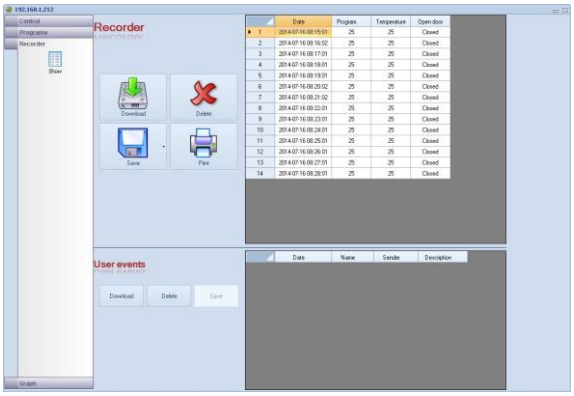
This window allows you to set the days of the week and time in the program.

3.3. Recorder

The recorder enables downloading data from the device to the computer and saving to a text file.
Press "**Show**" to open the *Recorder Window*. You can download data from the recorder by pressing .

You will then see the download progress bar.





After the download the data is inputted into a table in chronological order.
You can delete data recorded in the device by pressing .
It is advisable to save data from the recorder before deleting it.

Press the button to open the saving window of the file containing recorder data.

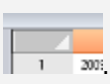
Button enables to print marked data.

The file is saved in the following format:

- txt – text file, it is possible to open the file in MsExcel to convert the data and create the charts.
- plk – EasyLab file format, it is possible to create the charts directly from the EasyLab software

In the bottom of the window you can see the registered events. You can save them in the EasyLab format as comments on the chart.

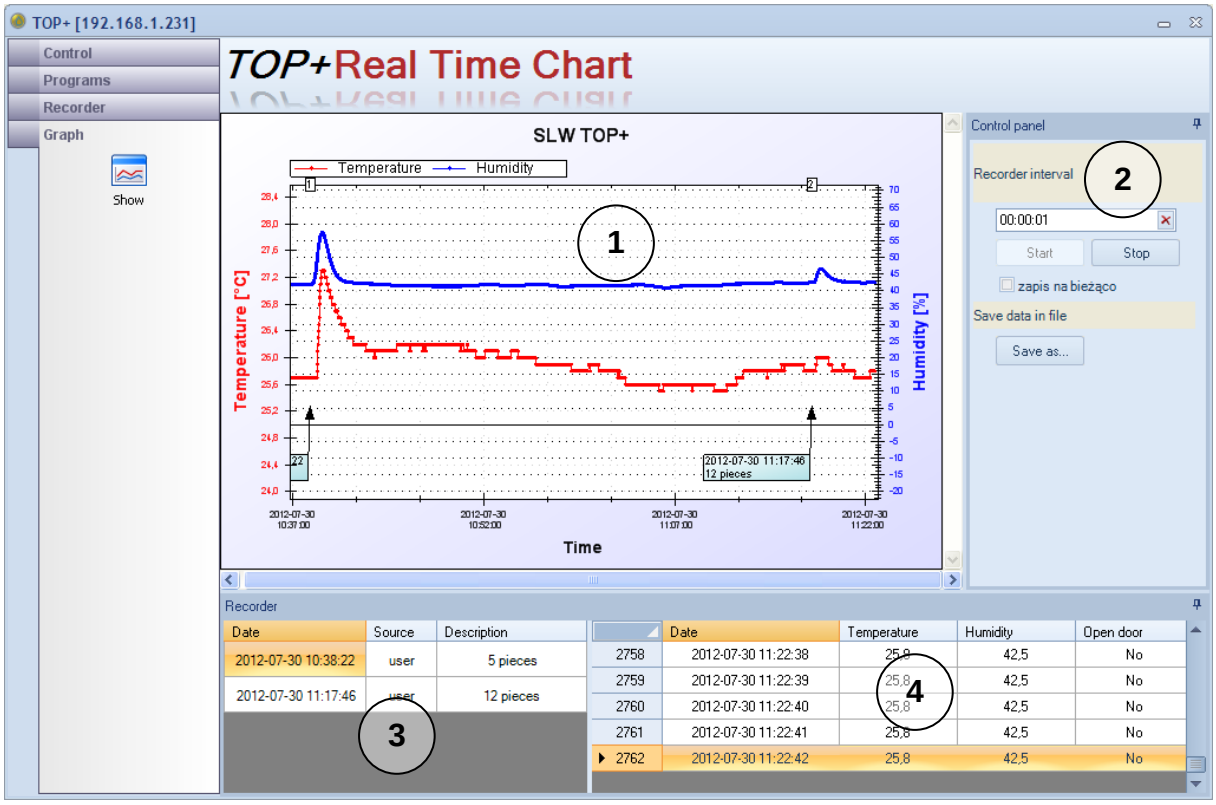
	You can copy part of the recorder data by marking desired cells with the mouse. You can copy the selected data to the clipboard by pressing CTRL+C.

	You can highlight the whole table by pressing the cell marked ◢ in the top left corner of the table  .

3.4. Graph

The chart window makes it possible to view the temperature and humidity (option) inside the chamber. The data seen in the charts is gathered with the interval (parameter **Recorder interval (2)**) which is determined by the user.

One chart (1) displays the temperature curve (red) and humidity curve (blue).



Recorded data has been shown in the table (4). The table contains some information on door openings too. Window no. 3 identifies events. The ID is sent by the user directly from the unit. It is then transferred onto the chart no. 1 as a window and consecutive number.

Live recording (2) – the chart can be saved automatically in the EasyLab file format (.plk) in order to avoid data loss in case of a power failure. You can save the chart at any time by clicking **Save as...**
To navigate the graph you need a computer mouse which enables you to:

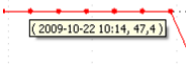
<u>The left button of mouse (the main button)</u>
Pressing and holding the left button of mouse you can mark any chart area which is to be enlarged.
<u>The middle button of mouse (a scroll wheel)</u>
Pressing and holding the middle button of mouse you can „catch" the chart. Moving the mouse you can shift the position of the chart in order to set it to desired fragment.
<u>Mouse wheel (if available)</u>

You can zoom in/out the chart using the mouse wheel.

The right button of mouse

Pressing the right button of the mouse in the chart window, you can enter **Context menu**, where you can find the following options:

- ***Copy*** – copies the graph to the clipboard
- ***Save as...*** – saves the graph in any graphic format (eg. jpg, .bmp, .tif, .emf, .png. format)
- ***Page settings*** – printed page settings (orientation and paper sheet).
- ***Print*** – print command
- ***Show values*** – shows values in a given point of the graph



- ***Zoom out*** – returns to the previous view of the chart
- ***Undo all*** – view of the chart returns to the original size
- ***Default scale*** – graph axes take default values
- ***Report*** – shows the visible area report
- ***Graph settings*** – opens the window with graph settings.

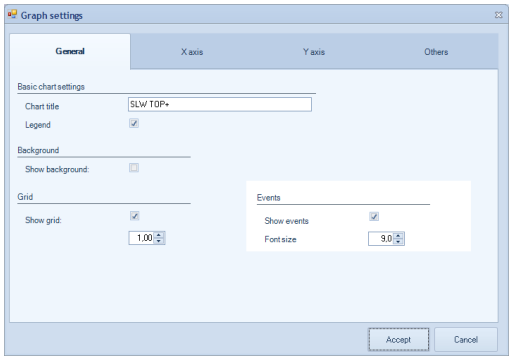
There are 4 tabs available in this window:

General

Chart title – allows changing the title of the chart

Show background – turns on/off the background of the chart

Show grid – turns on/off points concerning measurement.



Size – determines the size of the test points on the screen and printout

Events – show events IDs on the chart

X Axis, Y Axis

Minimum – determines the minimal value on X-axis or Y-axis – e.g in order to print a relevant fragment of the chart

Maximum – determines the maximal value on X-axis or Y-axis

Automatic – minimal and maximal value are automatically selected (the whole chart will be displayed on the screen)

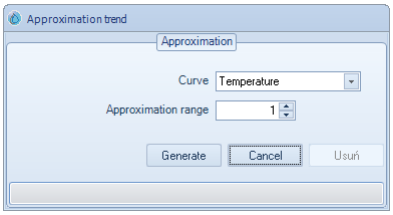
Others – allows to customize each course. The view of the course can be customized by the following options:

Show – turns on/off the drawing of the course

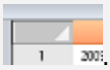
Show points – turns on/off the visibility of the points on the course

Size – determines the size of the points on the course

- ***Approximation*** – opens the trend Line approximation window. It's possible to show the temperature, humidity chart or additional sensor trend line. Determine the approximation range and press **Generate.** The parameters of the approximation line can be edited using the Graph settings window described above. To delete the approximation line, press the delete button.



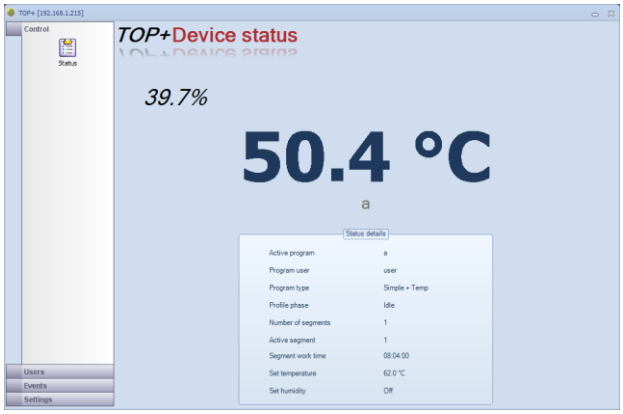
	You can copy part of the recorder data used to create charts by marking desired cells with the mouse. You can copy the selected data to the clipboard by pressing CTRL+C. This can be then used in other programs.

	You can highlight the whole table by pressing the cell marked ◢ in the top left corner of the table  .

4 RUNNING THE PROGRAM AS ADMINISTRATOR

If you log in as Admin (see chapter 3), there are extra functions available:

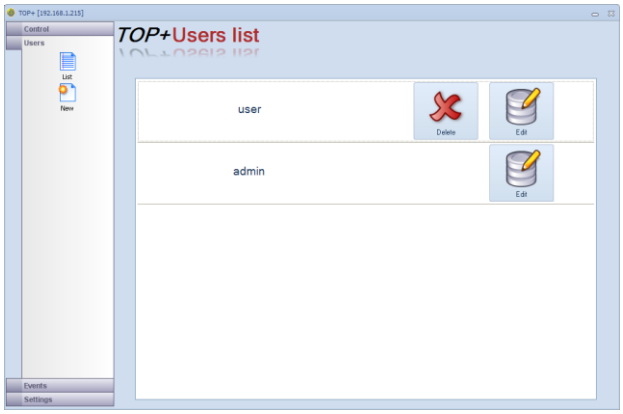
- Users
- Events
- Settings



The right side of the window depends on the chosen option.

4.1. Users

The Users window is used to set up the users, which will have access to the unit.



- List – show defined users. This option allows you to edit a user's account pressing the down the button which is located next to the user's name. It is also possible to delete the data pressing down the button.

- New – allows you to create a new user's account.

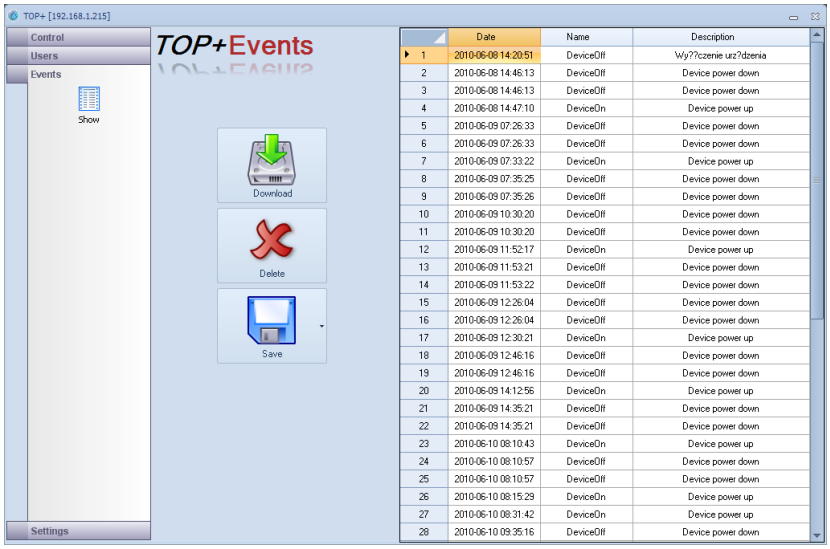
If it is not possible to create a new user account, it means that the maximum number of users has already been defined (5).

Each users has a login and password, as well as the max number of programs to define.

4.2. Events

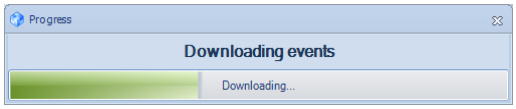
The logger gets data from the unit's registry to a PC and allows to save it in a text file.

All the information on alarms, programs and logged in sers are recorded.



After pressing down the **Download** button, the logger window is displayed.

To get the data, please press the button down.



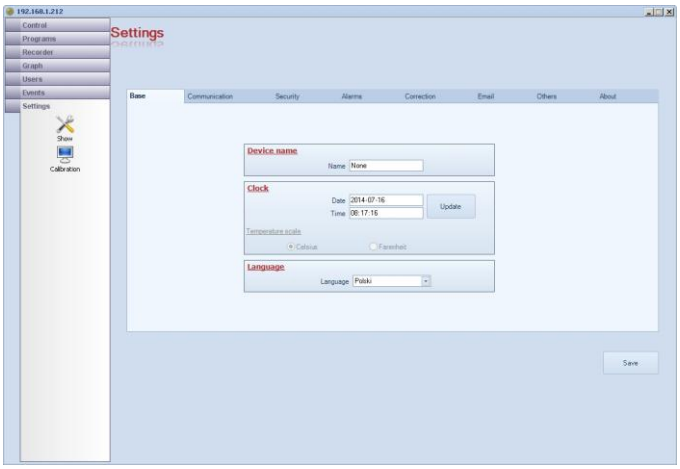
A progress bar will be displayed.

Once completed, all events are listed in chronological order. If you press down the button, an event will be deleted. It is recommended to save the data before deleting.

If you press down the button, you will be able to save the data to a text file (*.txt) with tab signs. It allows you to open the file in MS Excel for further data processing.

4.3. Settings

All device's settings are identical to the settings described in detail in the TOP+ instruction manual.



- Show

allows you to set up the unit.

The **Language** parameter is related to the language in the unit, the language in the program will not change.

If you change the data in **Network**, it is necessary to log in again to the unit (run the application again), using the new settings.

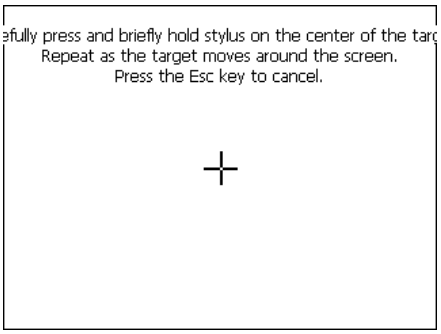
All settings in the **Alarms** depend on the temperature protection class of the unit. More information is available in Manual for TOP+ devices (Over/Under Temperature Protection)

The **SMS** window allows to determine 2 telephone numbers to send the information to (info on exceeding the set values). The numbers should consist of 11 digits (2–digit country code + 9-digit phone no) without the "+" button before, e.g. 48123456789. The SMS info comes as an option,

The **Software version** window includes some data on the software of the unit. This information is important while reporting problems with the unit.

	Having introduced some changes, use the **Save** button to save them. If you have changed the network connection parameters, the window controlling a TOP+ unit will be closed automatically. It is necessary to reconnect with the unit using the new settings.

- Calibration – allows to calibrate the screen; „ + „ will appear on the screen. Tap the "+" and hold for ca. 2 sec. The "+" will move to another location. Perform the above activity till the calibration is finished. Press "ENTER" in the text which will appear after the calibration is completed.



	If the screen is not calibrated, it is very difficult to use the instrument correctly.

5. Software upgrade

You can upgrade the software to the latest version. If you have received the file from POL-EKO-APARATURA, unzip it and save it on your PC. In the menu, choose **Configuration/ Software upgrade.** Enter the device's IP address. Navigate to the folder where you have saved the software. You will data transmission progress bar. Once the transmission has been completed, the device will restart. After about 2 minutes, you will need to log in to the device again.

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- seminaries

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- ISE measuring
- dissolved oxygen meters
- conductivity meters
- photometers
- spectrophotometers
- thermo reactors
- turbidity meters
- heavy metals trace analyzers
- pH electrodes
- conductivity sensors
- D.O. sensors
- pH buffer solutions
- conductivity standards
- photometric tests
- chromatography syringes
- laboratory accessories

We advise our customers as far as the choice and maintenance of the equipment are concerned !

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