SR-300

Smoke Extraction
Control Panel

Configuration manual

Table of Contents

Version 1.3 as of 07/2021

SMAY reserves the right to modify this document.

1. **Basic Information**

1.1. Configurator

The SR-300 RYS configurator can be downloaded from the SMAY website.

To change the language from Polish to English go to JĘZYK PROGRAMU settings as shown below:
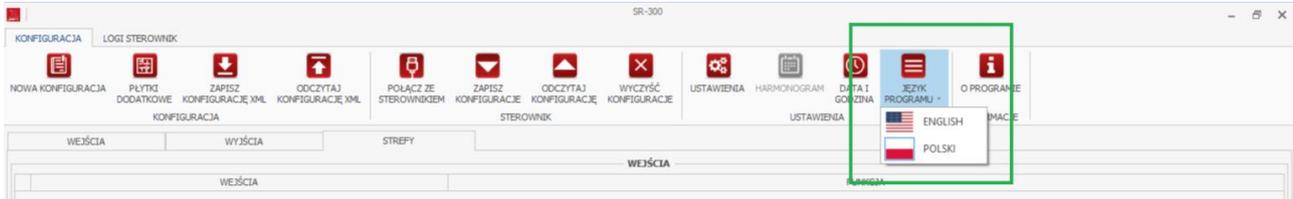
Choose English then close and open the program again.

1.2. Connecting to the panel

NOTE:

Before attempting to connect to the panel, the panel must be connected to the computer physically with a USB cable.

To connect to the control unit, press the CONNECT TO THE PANEL button on the Toolbar in Configuration mode.
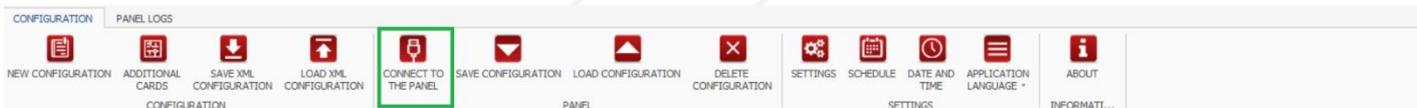
Figure 1.1 CONNECT TO THE PANEL button.

A dialogue box will appear in which the appropriate port must be selected.

Figure 1.2 COM port settings dialogue box.

Once connected to the panel, the term on the button changes to DISCONNECT. To disconnect from the panel, press the DISCONNECT WITH THE PANEL button on the toolbar in Configuration mode. Pressing the button will disconnect you from the panel.
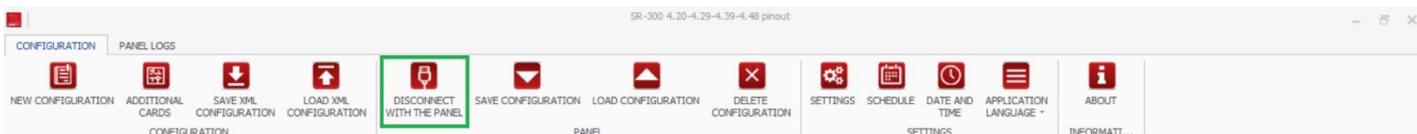
Figure 1.3 DISCONNECT button.

The configuration can be made without being connected to the control panel. A connection to the panel is only necessary to upload the configuration to the panel.

1.3. Program

After starting the program, a window opens:
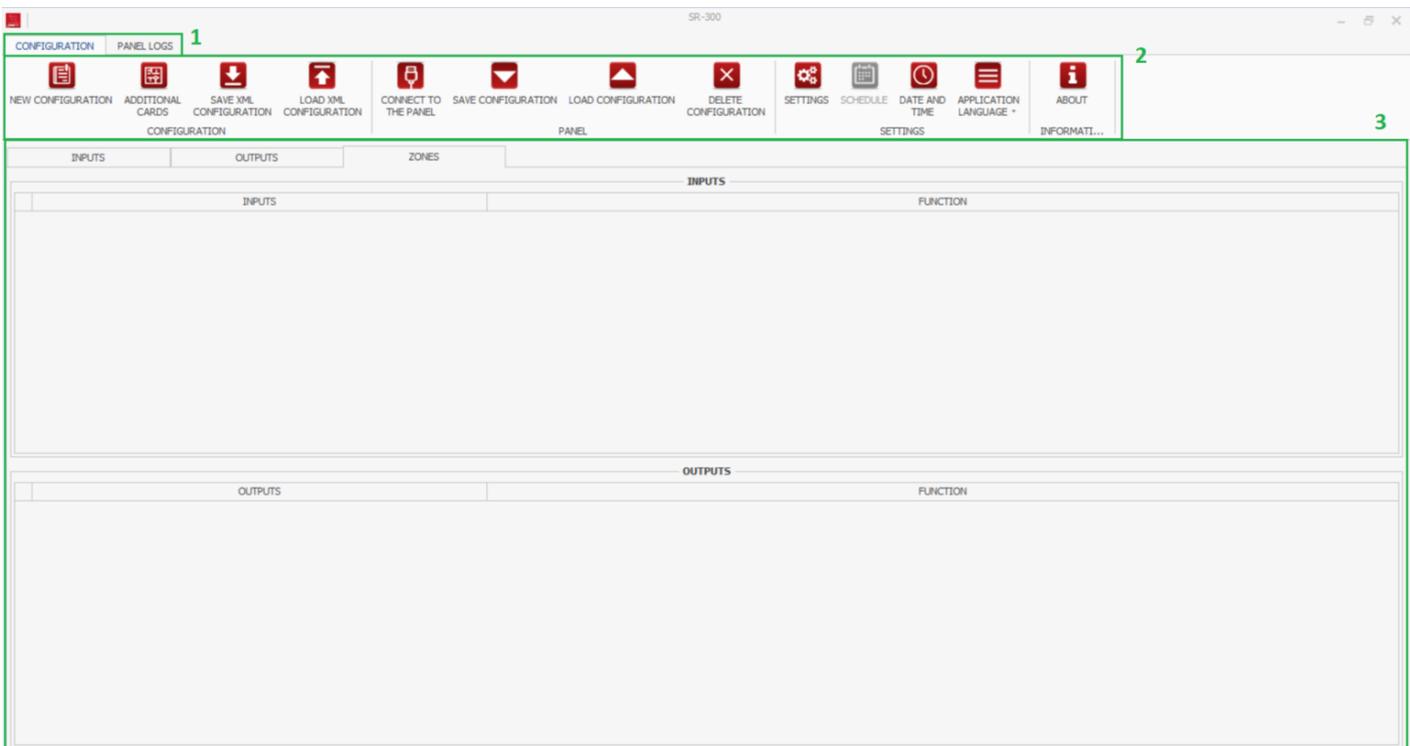
Figure 1.4 General view.

The window is divided into a taskbar (1); a toolbar (2) and an operations window (3).

In the taskbar (1), you can select the **configuration** mode for configuring the panel's inputs and outputs or the **Panel Logs** mode for reading logs from the connected panel.

The toolbar is used to select the tools appropriate to the current mode.

The operations window is the main area where most of the device's configuration activities are performed.

2. **Configuration**

The configuration mode is used to configure inputs, outputs and other parameters of the SR-300 RYS smoke extraction control panel.

The toolbar in Configuration mode is divided into four zones:

- Configuration – tools for creating, writing and reading central unit configurations
- Panel – tools for panel-PC communication
- Settings – tools for creating basic unit settings
- Information – presents basic information about the program

2.1. Tools
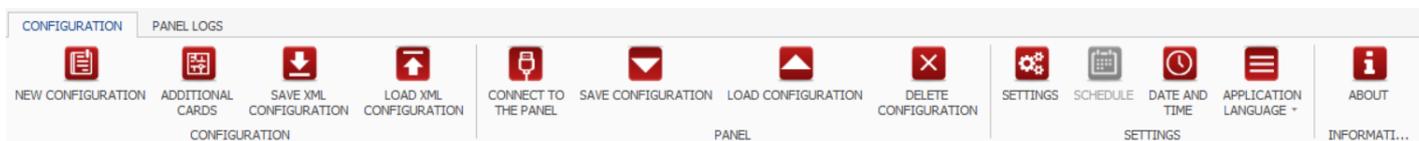
Figure 2.1 Configuration toolbar.

1. New configuration

This is used to create a new configuration of settings for a control panel. It is a basic tool to select the configuration of the appropriate type of central panel and the additional cards used.

2. Additional cards

Allows additional cards to be added to an existing configuration.

3. Save XML configuration

Allows the current configuration to be saved as a file with an XML extension.

4. Read XML configuration

Allows the current configuration to be read from a file with an XML extension.

5. Connect to the panel

Establishes a control panel-PC connection.

6. Save configuration

Used to install the configuration in the control panel.

7. Load configuration

Allows for the reading of the configuration currently installed in the control panel.

8. Settings

Allows the opening and closing times for specific actuators to be adjusted, as well as the ventilation and opening times for the ventilation of specific living areas.

9. Schedule

Allows the creation of weekly ventilation schedules for the respective living areas.

10. Date and time

Allows for the setting of the appropriate date and time.

11. Application language

Used to change the language of the configurator.

12. About

Displays basic program information and operating instructions.

2.2. Operations window

In configuration mode, the Inputs, Outputs and Zones tabs can be selected at the top of the Operations window. The Inputs tab allows you to assign functions and fire zones to the corresponding inputs of the control unit and auxiliary boards. Some inputs cannot be assigned functions because they are reserved for specific functions – such inputs are greyed out.

Figure 2.2 Inputs tab.

The Outputs tab also allows functions and fire zones to be assigned to the relevant outputs of the control panel and additional cards; here, too, some outputs are reserved and functions cannot be assigned to them.

Figure 2.3 Outputs tab.

The Zones tab allows to view assigned functions and ventilation and fire zones.

INPUTS

INPUTS	FUNCTION	FIRE 1	FIRE 2	FIRE 3	FIRE 4	VENTILATI...	VENTILATI...	VENTILATI...	VENTILATI...
Digital 4 (monitored)	FAS - FIRE ZONE 1	✓	✗	✗	✗	✗	✗	✗	✗
Digital 5 (monitored)	FAS - FIRE ZONE 2	✗	✓	✗	✗	✗	✗	✗	✗
Digital 6 (monitored)	FAS - FIRE ZONE 1, FIRE ZONE 2, FIRE ZONE 3, FIRE ZONE 4	✓	✓	✓	✓	✗	✗	✗	✗
Digital 7 (monitored)	FAS - FIRE ZONE 3	✗	✗	✓	✗	✗	✗	✗	✗
Digital 8 (not monitored) (MCP ventilation)	START VENTILATION - VENTILATION ZONE 1	✗	✗	✗	✗	✓	✗	✗	✗
Digital 9 (not monitored) (MCP ventilation)	STOP VENTILATION - VENTILATION ZONE 1	✗	✗	✗	✗	✗	✓	✗	✗
MCP 1 (monitored)	FIRE - FIRE ZONE 2, FIRE ZONE 3, FIRE ZONE 4	✗	✓	✓	✓	✗	✗	✗	✗
MCP 2 (monitored)	RESET	✓	✓	✓	✓	✗	✗	✗	✗
MCP 3 (monitored)	FIRE - FIRE ZONE 1	✓	✗	✗	✗	✗	✗	✗	✗
Smoke detectors 1	FIRE - FIRE ZONE 2	✗	✓	✗	✗	✗	✗	✗	✗
Smoke detectors 2	FIRE - FIRE ZONE 3	✗	✗	✓	✗	✗	✗	✗	✗

OUTPUTS

OUTPUTS	FUNCTION	FIRE 1	FIRE 2	FIRE 3	FIRE 4	VENTILATI...	VENTILATI...	VENTILATI...	VENTILATI...
Actuator 1	ACTUATOR 1 - FIRE ZONE 1, VENTILATION ZONE 1	✓	✗	✗	✗	✓	✗	✗	✗
Actuator 2	ACTUATOR 2 - FIRE ZONE 2, VENTILATION ZONE 1	✗	✓	✗	✗	✓	✗	✗	✗
Actuator 3	ACTUATOR 3 - FIRE ZONE 3, VENTILATION ZONE 3	✗	✗	✓	✗	✗	✗	✓	✗
Actuator 4	ACTUATOR 4 - FIRE ZONE 4, VENTILATION ZONE 4	✗	✗	✗	✓	✗	✗	✗	✓
Electric strike X5	ELECTRIC STRIKE - FIRE ZONE 1	✓	✗	✗	✗	✗	✗	✗	✗
Electric strike X6	ELECTRIC STRIKE - FIRE ZONE 1, FIRE ZONE 2, FIRE ZONE 3, FIRE ZONE 4	✓	✓	✓	✓	✗	✗	✗	✗
Potential-free 2	FIRE TO FAS	✓	✓	✓	✓	✗	✗	✗	✗
Potential-free 3	VENTILATION	✗	✗	✗	✗	✓	✓	✓	✓
Potential-free 4	FIRE TO FAS	✓	✓	✓	✓	✗	✗	✗	✗

Figure 2.4 Zones tab.

3. Panel Logs

Panel logs mode is used to read and clear logs from the device.

3.1. Tools

SR-300 4.8 pinout

CONFIGURATION | PANEL LOGS

READ LOGS

PANEL L...

Figure 3.1 Configuration toolbar in the panel logs mode.

1. Read logs
Allows for the reading of the device logs.

3.2. Operations window

LOG RECORD READ FROM PANEL MEMORY

FILTER : [   ] LOG DESCRIPTION ▾   LOG TYPE : ALL LOGS ▾

| NUMBER ▲	DATE AND TIME	LOG TYPE	LOG DESCRIPTION	STATUS
427	12-01-2022 15:03:12	OUTPUT STATE	MCP INDICATOR 4 OUTPUT - OUTPUT ACTIVE	OK
428	12-01-2022 15:03:12	OUTPUT STATE	MCP INDICATOR 2 OUTPUT - OUTPUT NOT ACTIVE	OK
429	12-01-2022 15:03:12	ALARM ACTIVE	FIRE ZONE 1 - ALARM	OK
430	12-01-2022 15:03:12	INPUT STATE	MCP INPUT 2 (MONITORED) - ACTIVE	OK
431	12-01-2022 15:02:13	OUTPUT STATE	MCP INDICATOR 3 OUTPUT - OUTPUT ACTIVE	OK
432	12-01-2022 15:02:13	OUTPUT STATE	POTENTIAL-FREE OUTPUT 1 - OUTPUT NOT ACTIVE	OK
433	12-01-2022 15:02:03	OUTPUT STATE	ACTUATOR 1 OUTPUT - ACTUATOR IS CLOSING	OK
434	12-01-2022 15:02:03	OUTPUT STATE	MCP INDICATOR 5 OUTPUT - OUTPUT NOT ACTIVE	OK
435	12-01-2022 15:02:03	OUTPUT STATE	MCP INDICATOR 4 OUTPUT - OUTPUT NOT ACTIVE	OK
436	12-01-2022 15:02:03	OUTPUT STATE	MCP INDICATOR 3 OUTPUT - OUTPUT NOT ACTIVE	OK
437	12-01-2022 15:02:03	PROGRAM START		OK
438	12-01-2022 14:59:13	OUTPUT STATE	MCP INDICATOR 3 OUTPUT - OUTPUT ACTIVE	OK
439	12-01-2022 14:59:13	OUTPUT STATE	POTENTIAL-FREE OUTPUT 1 - OUTPUT NOT ACTIVE	OK
440	12-01-2022 14:59:05	OUTPUT STATE	ACTUATOR 1 OUTPUT - ACTUATOR IS CLOSING	OK
441	12-01-2022 14:59:05	OUTPUT STATE	MCP INDICATOR 5 OUTPUT - OUTPUT NOT ACTIVE	OK
442	12-01-2022 14:59:05	OUTPUT STATE	MCP INDICATOR 4 OUTPUT - OUTPUT NOT ACTIVE	OK
443	12-01-2022 14:59:05	OUTPUT STATE	MCP INDICATOR 3 OUTPUT - OUTPUT NOT ACTIVE	OK
444	12-01-2022 14:59:03	PROGRAM START		OK
445	12-01-2022 14:59:02	CONFIGURATION SAVED		OK
446	12-01-2022 14:58:55	OUTPUT STATE	ACTUATOR 4 OUTPUT - FUSE DAMAGE - START	OK
447	12-01-2022 14:58:55	OUTPUT STATE	ACTUATOR 3 OUTPUT - FUSE DAMAGE - START	OK
448	12-01-2022 14:58:55	OUTPUT STATE	ACTUATOR 2 OUTPUT - FUSE DAMAGE - START	OK
449	12-01-2022 14:58:55	OUTPUT STATE	ACTUATOR 1 OUTPUT - ACTUATOR IS CLOSING	OK
450	12-01-2022 14:58:55	OUTPUT STATE	MCP INDICATOR 5 OUTPUT - OUTPUT NOT ACTIVE	OK
451	12-01-2022 14:58:55	OUTPUT STATE	MCP INDICATOR 4 OUTPUT - OUTPUT NOT ACTIVE	OK
452	12-01-2022 14:58:55	OUTPUT STATE	MCP INDICATOR 3 OUTPUT - OUTPUT NOT ACTIVE	OK
453	12-01-2022 14:58:55	OUTPUT STATE	MCP INDICATOR 1 OUTPUT - OUTPUT NOT ACTIVE	OK
454	12-01-2022 14:58:55	INPUT STATE	MCP INPUT 1 (MONITORED) - OPEN CIRCUIT	OK

Figure 3.2 Operations window in the panel logs mode.

The operations window allows for the searching of the logs for a specific word in the type, description or date and time of the log, or viewing logs of a specific type only.

4. **Tools**

4.1. New configuration

To start a new configuration of the RYS control panel, click on the NEW CONFIGURATION button on the toolbar in configuration mode.
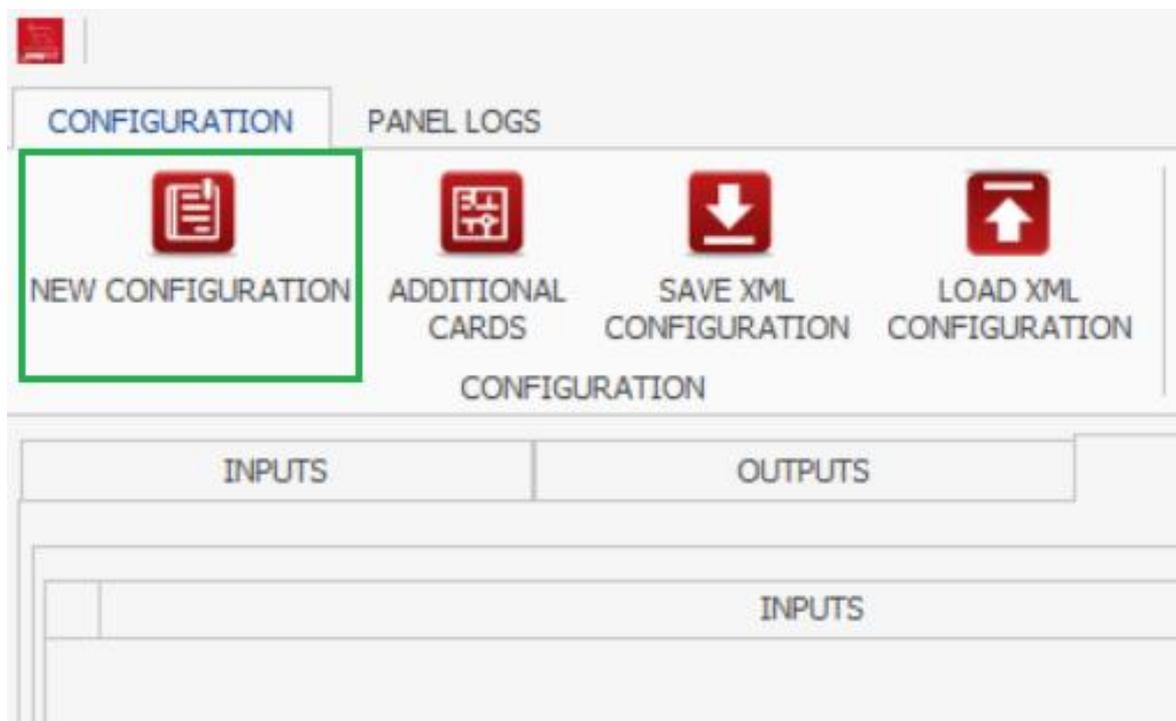

Figure 4.1 NEW CONFIGURATION button.

The following dialogue box will appear on the screen:

Figure 4.2 NEW CONFIGURATION dialogue box.

First, select from the drop-down list the type of control unit to be configured (for example, 1.4 Pinout). Then, select the additional cards with which the RYS smoke ventilation control panel will be equipped. If the configuration does not support specific additional cards, the unsupported cards will be greyed out and cannot be selected. Complete the process by pressing the SAVE CONFIGURATION button.

Once the configuration has been saved, the available RYS panel inputs and outputs you selected in the previous step will appear in the main program window.
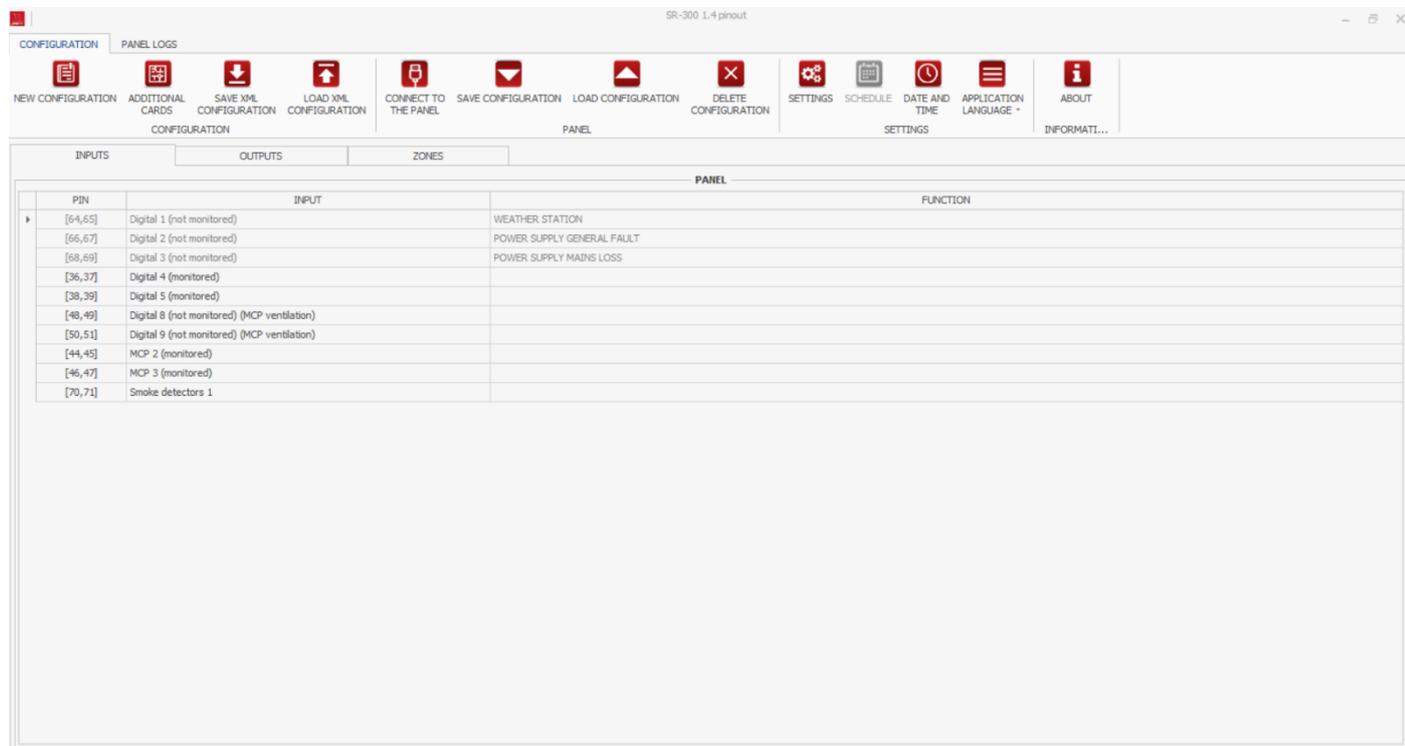
Figure 4.3 Available inputs – general view.

3.1.1 Input configuration

To start configuring the device's inputs, select the INPUTS tab in the taskbar at the top of the operations window.
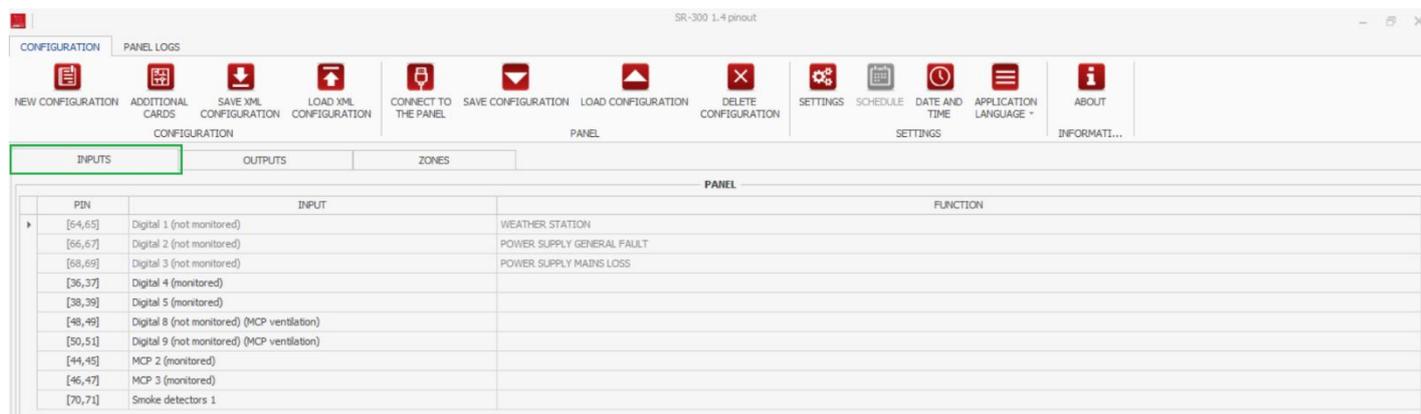
Figure 4.4 INPUTS tab.

The main window of the program contains all the available inputs of the device to be configured, divided into three columns: the PIN column, where the pin numbers on the control board of the given input are entered; the INPUT column, where the types of available inputs of the control panel are listed and the FUNCTION column, where you can set the function and the ventilation or fire zone to the given input.
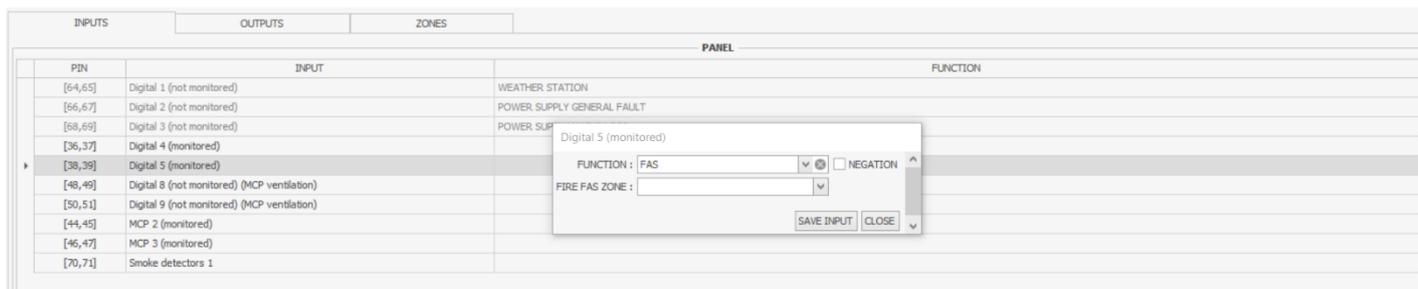
Figure 4.5 Input settings.
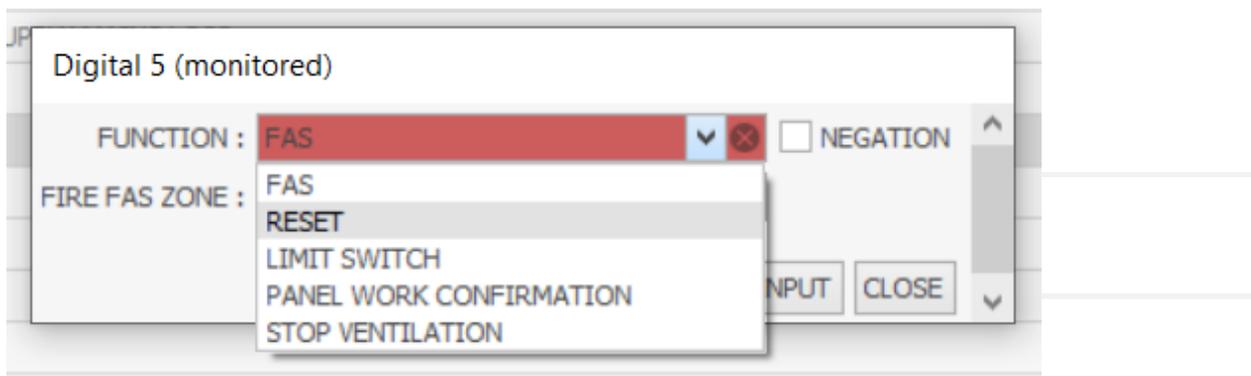
Figure 4.6 Available functions of a monitored digital input.

Table 4.1 Available input functions.

Function	Description
FAS	Enables the unit's fire mode to be activated by FAS
RESET	Allows a fire mode reset, for example, from the MCP button
LIMIT SWITCH	Enables the receival of information on whether the smoke vent is open/closed
PANEL WORK CONFIRMATION	Retrieves information on whether the devices in a particular fire zone are active during a fire
STOP VENTILATION	Allows ventilation mode to be deactivated, for example, from a MCP button or ventilation button
START VENTILATION	Allows ventilation mode to be activated, for example, from a MCP button or ventilation button
WEATHER STATION	Signal from a weather station (function permanently assigned to input 1)
POWER SUPPLY GENERAL FAULT	Power supply general fault signal (function permanently assigned to input 2)
POWER SUPPLY MAINS LOSS	230 V mains fault indication (function permanently assigned to input 3)

To set up a particular central panel input, double-click on the input you wish to configure. At this point, a dialogue box will appear where you first select the function of the input signal and then assign the zone to be set up for the relevant fire or ventilation zone, depending on the function of the zone in question. To cancel the selection, press the X button to the right of the function window; the input will then remain unassigned. The process can be completed by pressing the SAVE INPUT button.

Inputs reserved for specific functions are not configurable and are greyed out.

3.1.2 Output configuration

To start configuring the device's outputs, select the OUTPUTS tab in the Taskbar at the top of the Operations window. A list of all the available outputs of the RYS central panel to be configured will appear in the program Operations window.

Figure 4.7 OUTPUTS tab.

To set up a particular control panel output, double-click on the output you wish to configure. At this point, a dialogue box will appear where you should input the relevant settings:

Figure 4.8 Output settings – general view.

For the actuator output, the following must be assigned: fire zone; vetilation zone; opening delay (0–60 s) and, in the case of type G actuators, the corresponding box must be checked. For door-opening actuators, the ventilation zone should not be assigned.

Figure 4.9 Actuator output settings.

For the output of the electric door strike, assign fire zone, type (reversible/standard) and delay (0–60 s).

Figure 4.10 Electric door strike output settings.

For a potential-free output, the function and delay must be assigned. For the FIRE and FIRE ZONE WORK CONFIRMATION function, a fire zone must also be assigned. For each function, it is possible to select the NEGATION option, which reverses the logic of the relevant output.

Figure 4.11 Potential-free output settings – FIRE to FAS function.

For the acoustic sounder beacon output, select the fire zone, delay and operating time. Entering a zero in the operating time field makes the output active until the fire mode of the zone is reset.

Figure 4.12 Acoustic sounder beacon outputs settings.

For the light beacon output, select the fire zone, delay and operating time.

Figure 4.13 Light beacon output settings.

Function	Description
FIRE TO FAS	Sends fire information to FAS
WORK CONFIRMATION	Communicates the correct work of all elements involved in the fire scenario
FIRE ZONE WORK CONFIRMATION	Communicates the correct operation of equipment throughout the fire zone during a fire
FIRE	Indicates that the control panel is in fire mode
VENTILATION	Communicates that the ventilation mode is active
FIRE TO POWER SUPPLY	Indicates fire mode to the power supply
SOUNDER BEACON	In fire mode, this turns on the sounder beacons
LIGHT BEACON	In fire mode, this turns on the light beacon
FAULT TO FAS	Transmits fault information to the FAS (function permanently assigned to output 1)

3.1.3 Zone preview

Switching to the "ZONES" tab on the bar in the upper part of the operations window shows the entire list of thepanel's inputs and outputs, as well as the zones (ventilation and fire) to which these inputs/outputs have previously been assigned.
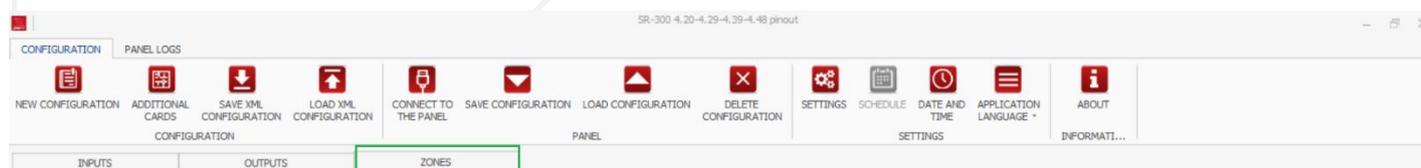
Figure 4.14 ZONES tab.

In the example below, digital input 5 is assigned the FAS function and fire zone 1; digital input 9 is assigned the STOP VENTILATION function and ventilation zone 1; while the actuator output is assigned both fire zone 1 and ventilation zone 1 and the electric door strike output is assigned fire zone 1.

Figure 4.15 Operations area in the ZONES tab – an example.

3.2 Settings

The settings for the opening and closing times of the actuators and the ventilation and opening times in ventilation can be configured by clicking the settings button on the toolbar in configuration mode.

Figure 4.16 SETTINGS button.

After pressing the button, a dialogue box will appear in which the opening time in alarm (maximum of 4 minutes), namely, the time after which a brief closing and re-opening occur to prevent the flap from freezing and the actuator closing time (maximum of 10 minutes) can be set for the actuators. Both times are set in seconds.

The opening time in alarm translates into the opening angle of the flap.

For ventilation zones, however, a ventilation time can be set when ventilation is called from the ventilation button (maximum 600 minutes) and the ventilation opening time (maximum two minutes).

The ventilation opening time translates to the opening angle of the flap.

Also, it is possible to select which actuators will open the smoke vents in the service/roof hatch mode.

To save the settings, press the SAVE button.

Figure 4.17 SETTINGS dialogue box.

3.3 Schedule

NOTE:

The Scheduling tool is only available for the SR-300 RYS smoke extraction control panel with connected additional board 5 – WEATHER STATION. The process of adding an additional card is described in section 5.5 of the manual. Adding an additional card 5 – WEATHER STATION in the configuration without physically connecting the weather station is done at user's own risk.

The weekly ventilation schedule for the ventilation areas can be configured by clicking on the SCHEDULE button on the toolbar in configuration mode.

Figure 4.18 SCHEDULE button.

When the button is pressed, a dialogue box will appear in which the columns can be set, from left to right:

- Time in minutes between ventilation calls (the time counts down from the end of the previous call)
- Time in minutes specifying how long ventilation is to be active in the zone (for time 0 minutes, ventilation will be active until it is deactivated from the weather station, manually via the ventilation button or after a fire alarm reset)
- Ventilation activation start time
- Ventilation activation stop time

The lines represent the consecutive days of the week.

To start configuring the schedule, select the appropriate zone (1) and check the SCHEDULE ACTIVE box (2). To save the Schedule, press the SAVE SCHEDULE button.

SCHEDULE
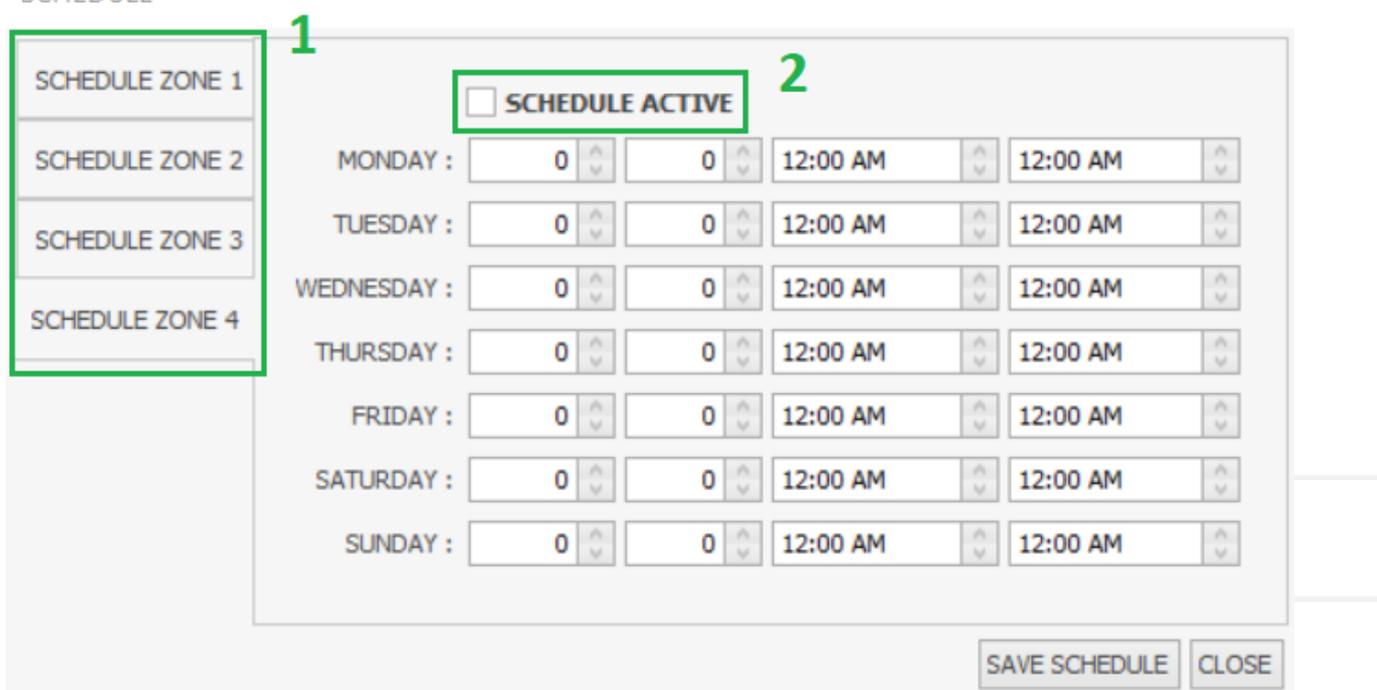
Figure 4.19 SCHEDULE dialogue box – (4.8 Pinout view).

3.4 Date and time

The date and time can be configured by clicking on the DATE AND TIME button on the Toolbar in Configuration mode.
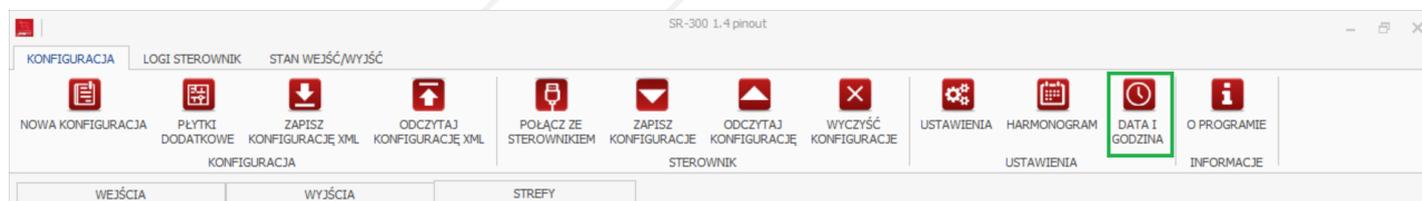
Figure 4.20 DATE AND TIME button.

When the button is pressed, a dialogue box will appear in which you can enter the current date and time. The date can be selected from the drop-down calendar; to do so, click the arrow to the right of the text field. The date and time can also be entered manually by typing the day, the first letter of the month (for months starting with the same letter, the first letter of the month must be typed again, which changes to the next month with a name starting with that letter) and confirming the month, year and time proposed by the program. To save the date and time, press the SAVE button.
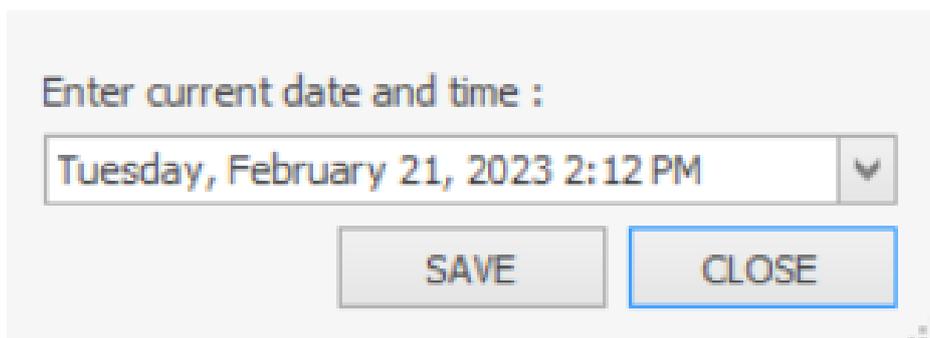
Figure 4.21 DATE AND TIME dialogue box.

3.5 Additional cards

Additional cards can be attached to the current configuration by clicking on the AUXILIARY BOARDS button on the toolbar in configuration mode.
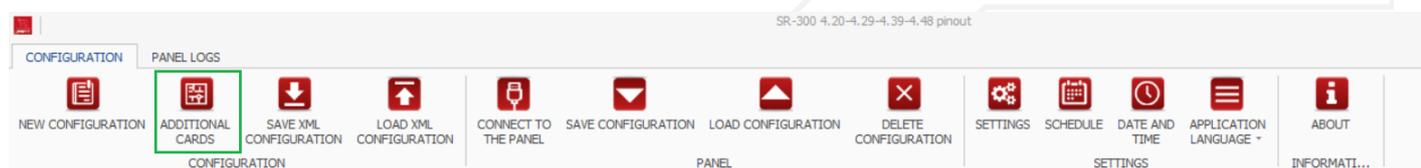
Figure 4.22 ADDITIONAL CARDS button.

When the button is pressed, a dialogue box will appear with which additional cards can be added or removed from the current configuration. Adding and removing cards is done by checking or unchecking the box to the left of the name of the relevant card. In the example illustration, ADDITIONAL CARD 1 – IN/OUT is added, while all other boards are removed. To save the additional cards, press the SAVE ADDITIONAL CARDS button.
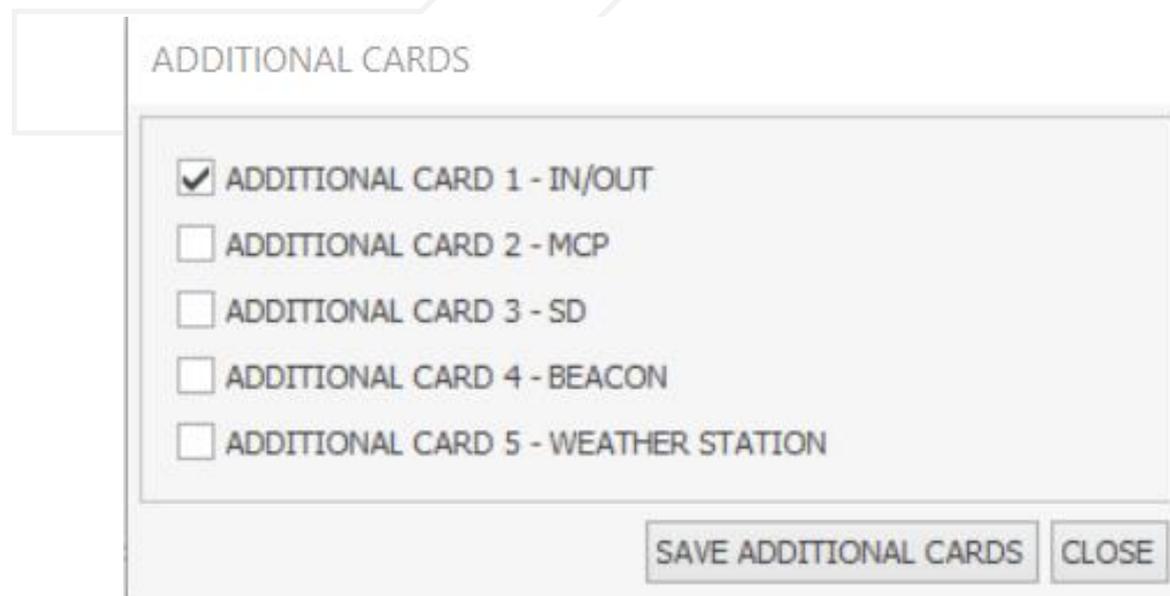
Figure 4.23 ADDITIONAL CARDS dialogue box.

3.6 Save XML configuration

The current configuration can be saved in XML format by clicking on the SAVE XML CONFIGURATION button on the toolbar in configuration mode.

Figure 4.24 SAVE XML CONFIGURATION button.

After pressing the button, a dialogue box will appear in which the current configuration can be saved as an XML format file. The configuration can be given a name by typing it into the appropriately named text field and the configuration can be saved in the desired location by selecting it with the three-dot button to the right of the text field labelled Location or by typing it manually into the text field. To complete the process, press the SAVE button.
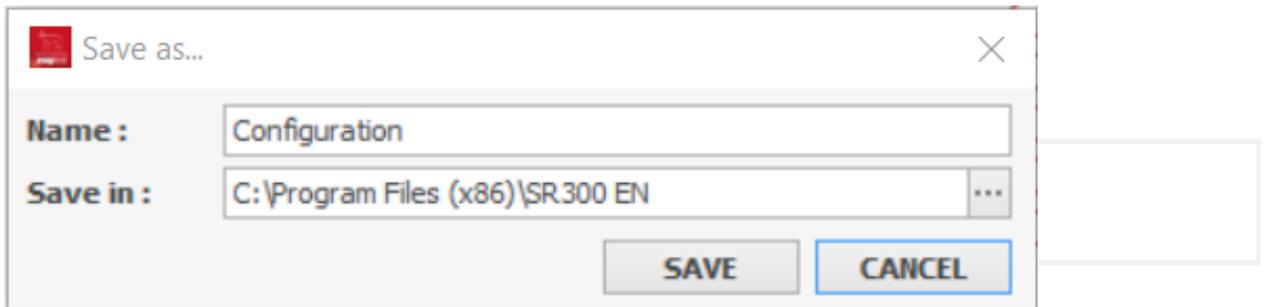

Figure 4.25 Save as dialogue box.

3.7   Read the XML configuration

The saved configuration can be read in XML format by clicking on the READ XML CONFIGURATION button on the toolbar in configuration mode.
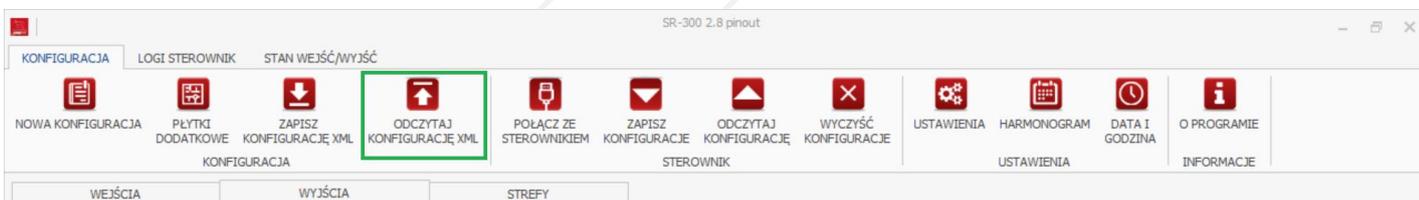
Figure 4.26 READ THE XML CONFIGURATION button.

When the button is pressed, a dialogue box will appear in which the location of the configuration saved in XML format must be selected. The location can be selected using the button with three dots to the right of the text box or it can be entered directly into the text box. To complete the process, press the SAVE button.
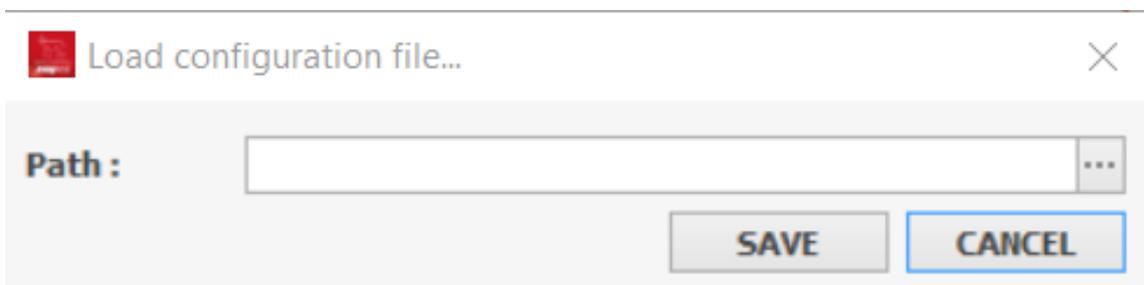

Figure 4.27 Load configuration file dialogue box.

3.8   Connect to the panel

The connection to the controller is described in section 1.1 of this manual.

3.9 Save the configuration

To save the current configuration, click on the SAVE CONFIGURATION button on the Toolbar in Configuration mode.
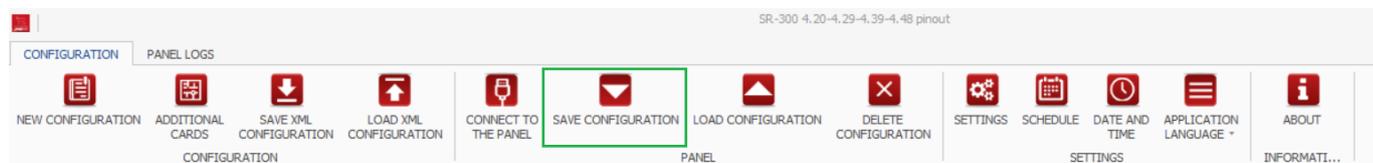
Figure 4.28 SAVE CONFIGURATION button.

When the button is pressed, a dialogue box with a message will be displayed.
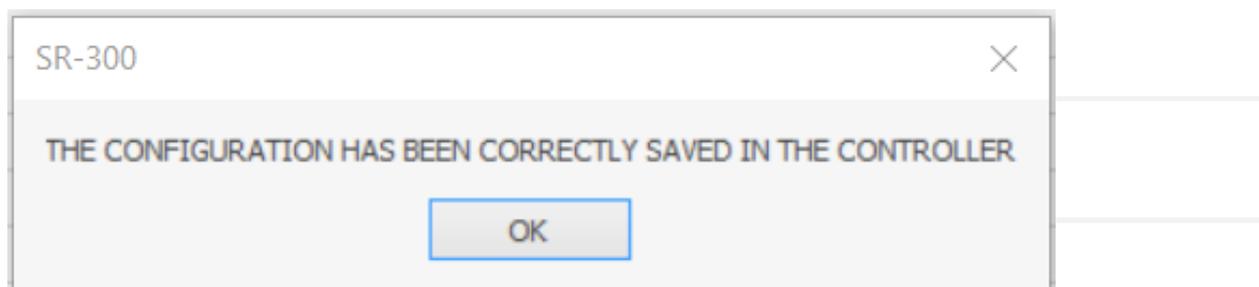
Figure 4.29 Save configuration dialogue box.

3.10 Load configuration

To load the current saved configuration, click on the LOAD CONFIGURATION button on the toolbar in configuration mode.
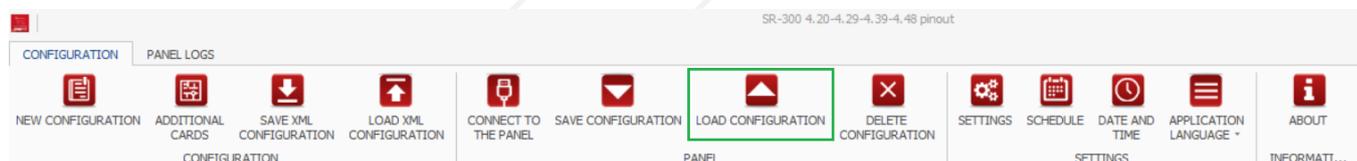
Figure 4.30 LOAD CONFIGURATION button.

When the button is pressed, the configuration stored in the panel will be loaded to the configurator immediately.

3.11 Delete configuration

To delete the current panel configuration, click on the DELETE CONFIGURATION button on the toolbar in configuration mode.
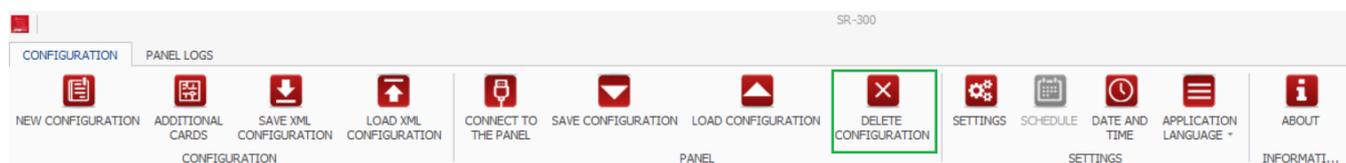
Figure 4.31 DELETE CONFIGURATION button.

After pressing the button, a dialogue box will appear asking if you are sure you want to delete the configuration from the device. To delete the configuration in the controller, press Yes.
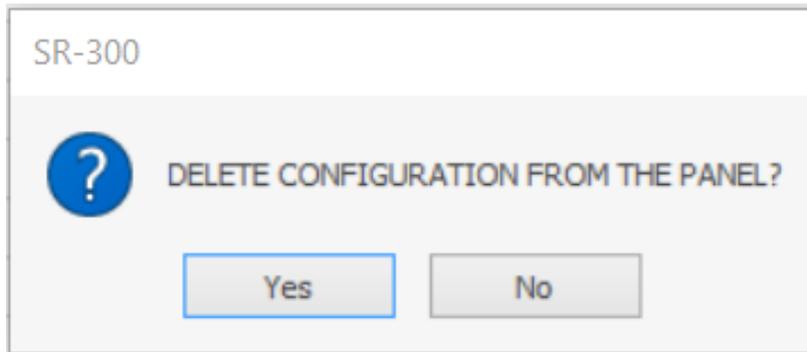
Figure 4.32 Delete configuration dialogue box.

3.12 Read logs

To read the logs from the device, press the READ LOGS button on the toolbar in configuration logs mode.

Figure 4.33 READ LOGS button.

When the button is pressed, the log of events read from the controller's memory will appear in the operations area; the controller stores a maximum of 1,000 logs.


Figure 4.34 Read logs operations area.

Error logs are displayed in red and are marked with the status ERROR.

3.13 About the program

To access the program documentation, press the ABOUT button on the toolbar in configuration mode.
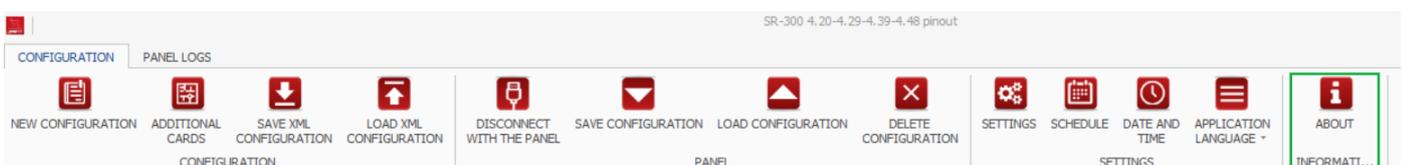
Figure 4.35 ABOUT button.

After pressing the button, the following dialogue box will appear. To access the program manual, press the OPEN PROGRAM DOCUMENTATION button.
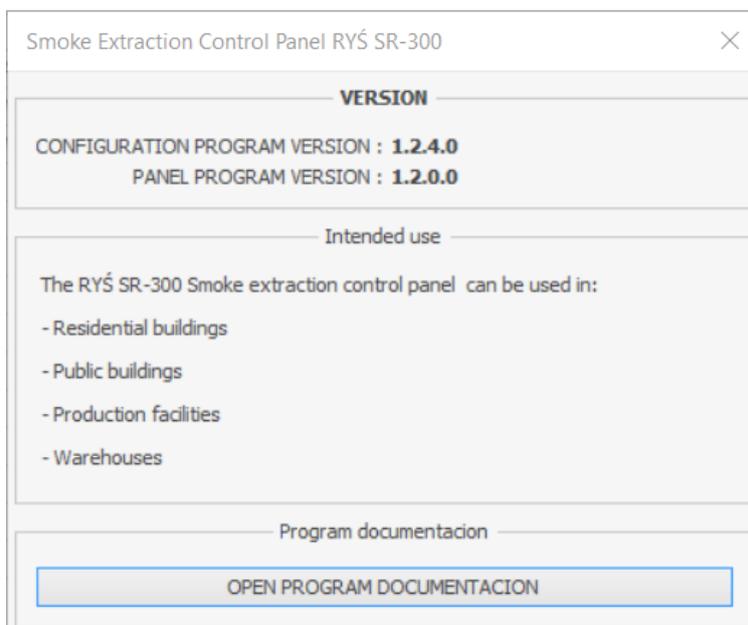

Figure 4.36 About dialogue box.

5. **New Control Panel Configuration**

To enter the new configuration of the control panel, follow the procedure below; the points marked with an asterisk are optional and do not always have to be performed.

Procedure for configuration:

1. Create of a new configuration (section 4.1 of the manual)
2. Configure panel inputs (section 4.1.1 of the manual)
3. Configure panel outputs (section 4.1.2 of the manual)
4. Check the correct assignment of the panel inputs and outputs in the zone preview (section 4.1.3 of the manual)
5. Set actuator opening closing and ventilation times, and opening times in ventilation (section 4.2 of the manual)*
6. Set ventilation schedule for ventilation zones (section 4.3 of the manual)*
7. Set current date and time (section 4.4 of the manual)
8. Save the configuration as an XML file (section 4.6 of the manual)
9. Physically connect panel and the computer via a USB cable
10. Connect to the panel (section 4.8 of the manual)
11. Save the configuration on the panel (section 4.9 of the manual)