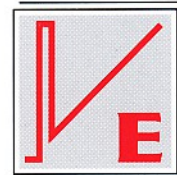


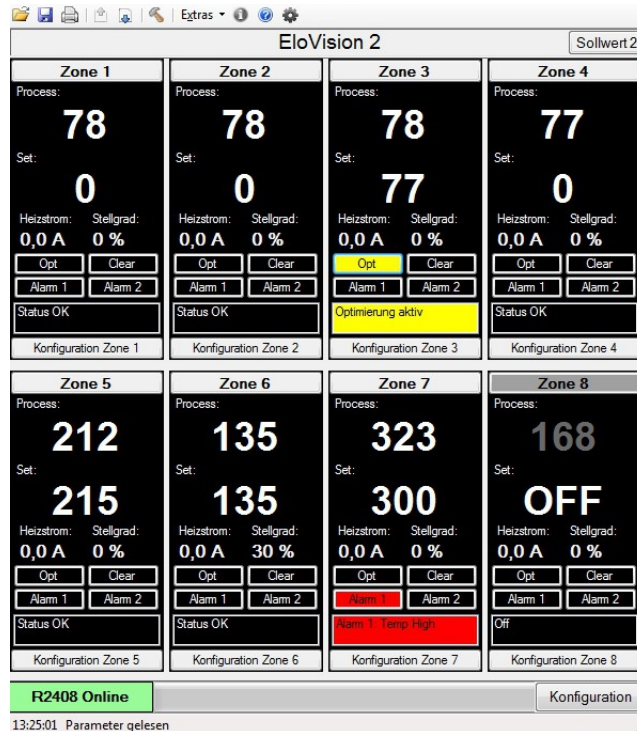
# Software EloVision 2

For configuration of Elotech controllers.



**ELOTECH**  
INDUSTRIELEKTRONIK GMBH

## Description and operating manual



### Features:

- Reading out and storage of the controller configuration including all the texts
- Loading and uploading of controller configuration back to the controller
- Change controller parameters clearly online
- Copy controller parameters zone wise
- Print loaded configuration
- Set controller to factory settings
- Easy input of set values in the visualization window
- Overview of all actual values in the visualization window

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## 2 Introduction

The software EloVision 2 serves for the configuration of temperature controllers of the company Elotech GmbH, and the visualization of set and actual values.

The controller parameters can be saved in form of XML files. Stored files can be read back and be transferred to other controllers of the same type.

The software was developed for Windows XP and Windows 7.

Windows 7 and Windows XP are registered trademarks of Microsoft Corporation in the United States

The actuation of the controller is done via our USB interface adapter USB-RS485-M-R2xxxS.

It may be necessary to install USB driver for the converter.

The software can only communicate with controllers with the S option of the company Elotech. The Controller must be activated for this communication.

Non-activated controllers with S-option can be licensed later. See chapter: Licensing

## 3 Preparation

Install **Elovision 2**: Run SetupElovision2.exe. The setup menu will copy the necessary files to the Applications folder and creates an entry in the Start menu.

### ***3.1 Identification of the assigned COM port***

If you are not sure which COM port has been assigned to the USB-RS232 converter, go to the Windows Device Manager.

Regard under "Ports (COM & LPT)" which COM port will disappear if you remove the converter and returns when you plug in the converter again. "USB Serial Port (COMx)"


Enter the identified port in the COM configuration in EloVision window later .

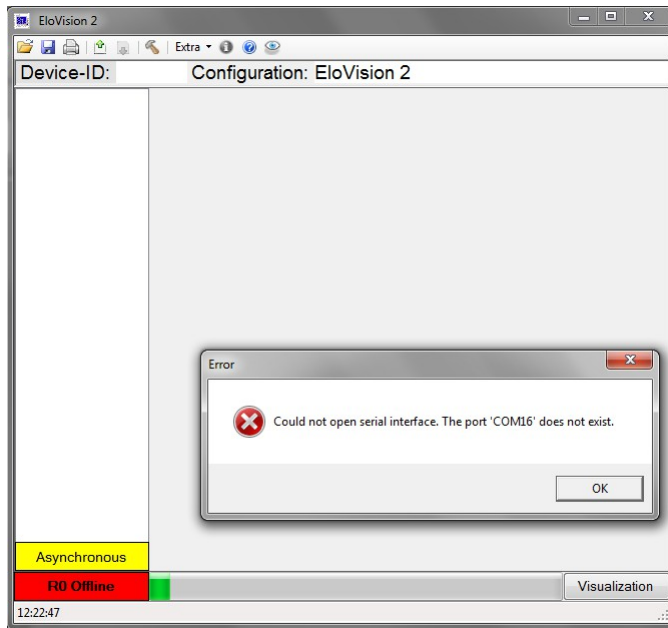
## 4 First program start

Before configuring a controller you have to connect the PC to the supplied RS485 cable.

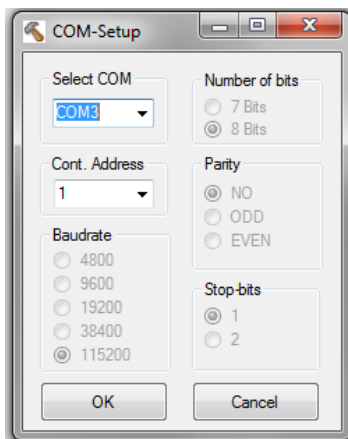
Supply the temperature controller with the auxiliary power and connect the green connector of the USB cable to the controller terminals 90-96.

The port COM1 to COM255 USB of the installed adapter must be selected.

Therefore please start the program Elovision 2, confirm the error message and click on the icon  hammer.




In the Configuration window, select the required COM port and click OK.



## 5 Read configuration

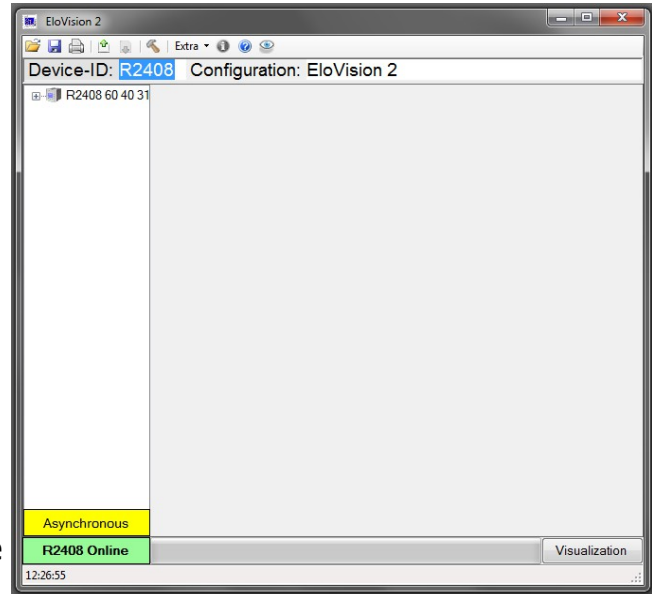
Upon successful connection with an unlocked controller, the right hand window is displayed.

Here as Device ID: R2408 the controller type appears. In the field Configuration, a name can be entered for this configuration.

By Pressing the button "Asynchronous" or by clicking on the  button all the parameters can be read from the connected controller.

The transfer duration depends on the zone number and can take several seconds.

The parameter texts are also read. They are read in the controller selected language.



After reading all the parameters, the display will change from asynchronous to synchronous and the Configuration window is filled with the parameters.

If the Controller is locked, **R2408 Online no license** will appear at the bottom. In this case you get by starting the program automatically into the software licensing window(Licensing). Later you get by clicking on the menu Extra / Licensing Licensing in the input window Licensing.

During the configuration operation, the keyboard of the controller is locked. If you try to adjust a value on the controller the display shows "REMO".

In the visualization process window the controller is freely adjustable.

A connected field bus, f. E. Profibus can always write to the Controller, provided that the remote operation is not turned off by the interface parameters of the controller. This can cause error messages when a value written from the PC can is not be read back, because it was overwritten by the field bus in the same moment.

## 6 Configuration window

By clicking on an entry in the tree view **1**, the configuration for the corresponding zone can be opened.

In field **2**, you can change the zone name. The zone name is also saved in the configuration file.

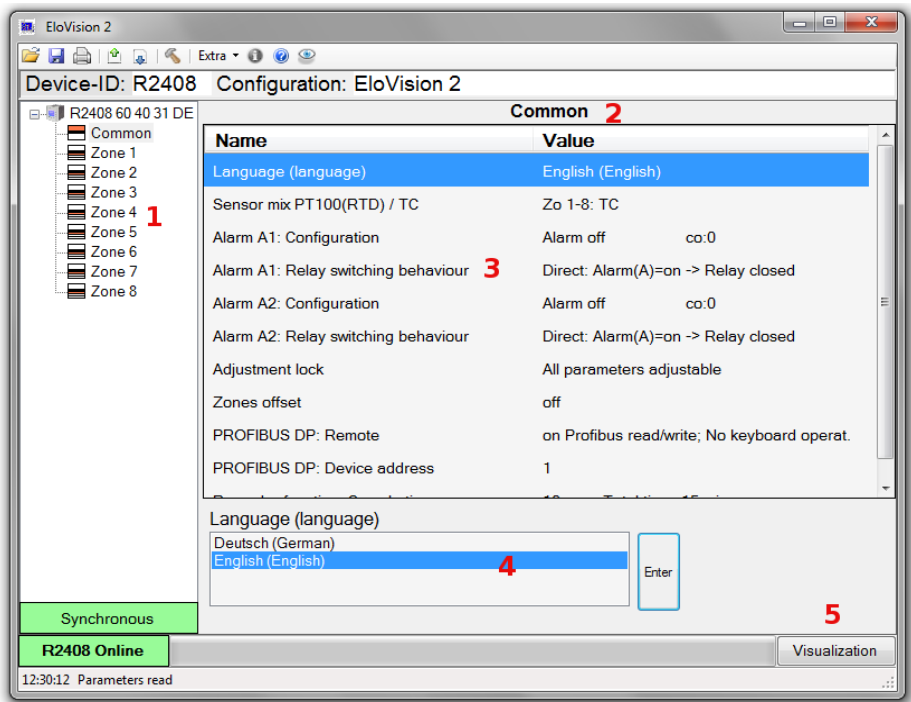
In field **3**, the individual parameters are selected. They are displayed in field **4**. In field 4 you can adjust the parameters and save them by pressing Enter. The parameters are transferred directly to the controller.

If other parameters are dependent on the adjusted parameter, the dependent parameters will be reloaded.

In field zone 1 .. n the Copy button, next to the enter button, is available. With this button you can copy all the parameters of the current zone to other zones. The type of sensor (TC/RTD) must be identical between the zones to be copied.

Therefore see also the section Zone „Copy“ .

By pressing the button visualization **5** you enter the panel Process visualization.



## 7 Control bar:



### 7.1 **Open Configuration**

Reading a saved controller configuration from a file.

### 7.2 **Save Configuration**

Save the read controller configuration as an XML file. The configuration name and the names of the zones will be saved too.

### 7.3 **Print Configuration**

Print of the loaded parameters with their adjusted values.

### 7.4 **Download Controller Configuration**

Transfer all parameters, including texts and values, from the controller to the PC.

### 7.5 **Transfer controller configuration to the controller**

Transfer all parameter values from PC to the controller. This works only with compatible controller hardware. With different versions of the software a warning will be displayed. It is the responsibility of the user to transfer the parameter values to the controller anyway. Please check the controller parameters in detail after transferring.

### 7.6 **Configure serial interface**

Adjust COM Interface and controller address. The controller and the PC-software are set to address 1 by factory defaults.

### 7.7 **Controller information**

More detailed information about controller type and software.

### 7.8 **Open this help file**

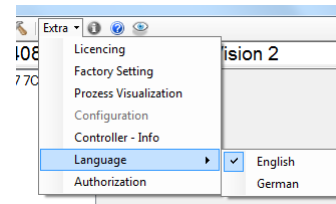
### 7.9 **Turn on controller visualization**

Switch from the configuration window to the visualization process - windows.

### 7.10 **Turn on configuration window**

Switch from the visualization process windows to the configuration window.

## 8 Extra:

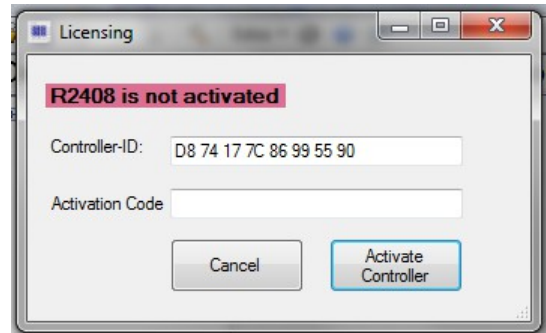


### 8.1 Licensing

Open licensing window to activate the controller.

When an unlicensed Controller is connected, following picture appears: To unlock please transmit the Controller - ID (here: 60 40 31 70 77 D8 DE 76) and the device - id (in this case R2408) to Elotech. You will receive an unlock code. Please enter the unlock code in the field below and press *Activate Controller*.

! If a registration trial was made with the wrong unlock code, the Controller must be switched off before the next attempt.



### 8.2 Factory setting

Opens the window "Factory setting".

The "Factory setting" sets all the parameters of the controller back to the Elotech - factory state.

### 8.3 Process visualization

Switch from the configuration window to the visualization process windows.

### 8.4 Configuration

Switch from the visualization process window to the configuration window.

### 8.5 Controller - Info

More detailed information about controller type and software.

### 8.6 Language

Switching of the user language to English or German. The language will only be changed after restart of the program.

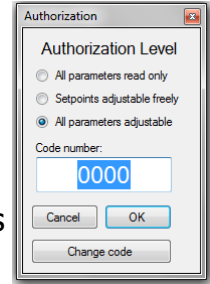


## 8.7 Authorization

Opens the window to the user "Authorization Level".

The authorization level can be changed to:

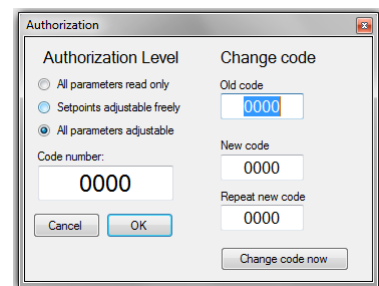
- All parameters read only: No parameters can be changed.
- Set point adjustable freely: In the visualization window, all settings are possible. Configuration parameters are locked.
- All parameters adjustable : All parameters are adjustable.



The authorization level can be changed only if the correct unlock code is entered. The unlock code for changing the rating level consists of 4 characters and is installed by default in the "0000".

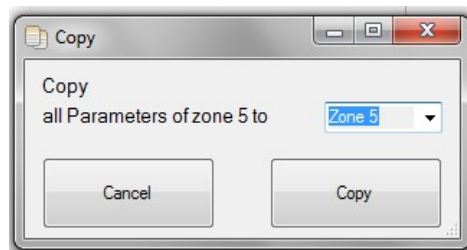
Change of the activation code:

Press the code button "Change code". The window expands. The old code and 2 times the new code must be entered. Press the "Change code now".



## 9 Zone „Copy“

Press the button "Copy" in the zone configuration window to open the following window:



In this window, the selected zone can be copied to one or all zones of the same type. Same type zones are zones that are set via the parameter "sensor mix RTD/ TC" on the same type of sensor.

## 10 Process visualization

In the window "process visualization" appears a view of all zones of the controller.

Press the button **1** here: "Zone 1" switches the zone off or on.

In the field Process **2**, the current value of the zone is displayed.

In Field **3**, the set point can be set by pressing Enter.

The heating current and the output level will be shown at **4**.

The buttons **5** Opt, Clear, Alarm 1 and Alarm 2 show the current (optimization, x alarm active) status.

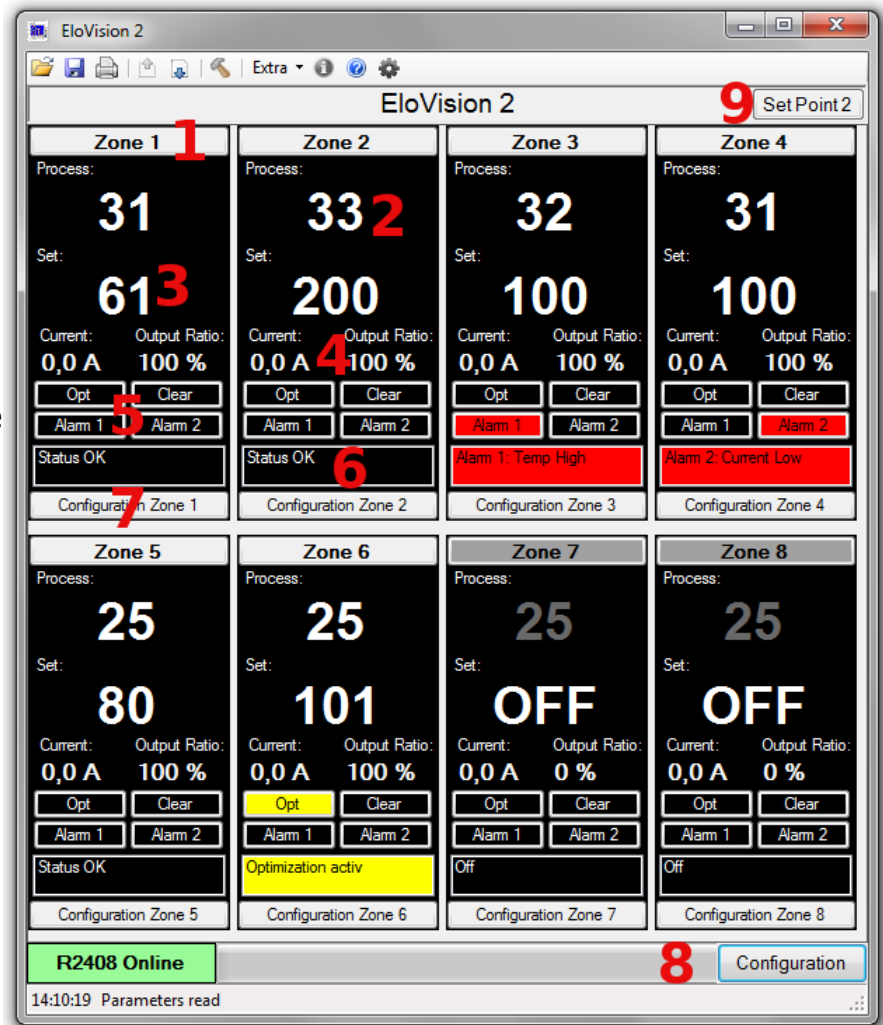
The current status of the zone is shown in the list **6**.

The button **7**, opens the zone configuration window for each zone.

the knob **8** changes into the general Configuration window.

By pressing the push button "set point 2" **9**, the second set point for the controller is switched on.

Please note: For switching a zone to set point 2, the zone parameter value "setpoint 2" may not be set to "OFF".



## 10.1 More information about the fields:

- 1** The switched-off zones are indicated by the dark gray button and the gray actual value. OFF is shown at the set point display.
- 2** At a sensor fault the process value is colored red. With a sensor failure, the measuring range end is displayed. At a sensor short-circuit the measuring range start.
- 3** If the number in the field Set is not selected, this field displays the current set point. While the focus is on the Set field, the set point is not updated. Type in a new value and press Enter to transmit a new set point to the controller. Invalid set points are acknowledged with an error message.
- 4** The actual values of the heating current (option) and the output ratio
- 5** Press the button "Opt" to start the optimization of the zone. Occurred errors can be acknowledged by pressing the button "Clear". The two buttons "alarm 1" and "alarm 2" are used to display the active zone alarms. The alarms 1 and 2 are additionally shown as a short text in the list **6**.
- 6** The status list displays messages, warnings and alarms to the appropriate zone.

"Status OK"	All in order, no special function is active.
"Optimization active"	The zone is in self-tuning mode (adaptation)
"Ramp active"	Ramp function is active
"Set point 2 active"	Zone controls to set point 2
"Off"	The zone is off
"Offline"	Controller is not connected
"Optimization error"	The optimization was terminated prematurely
"Sensor error"	Sensor break or short circuit
"SSR short circuited"	Only for current sensing: A continuous current flow was detected (failure of the semiconductor switch, SSR not separated)
"System error"	Can be reset with the button "Clear".
"Alarm 1: "	Alarm 1 active
"Alarm 2: "	Alarm 2 active
Depending on the alarm configuration an additional information appears:	
"Temp High"	Temperature alarm limit exceeded
"Temp OK"	Temperature within the tolerance band
"Temp Low"	Temperature alarm limit dropped below
"Temp Out"	Temperature tolerance band exceeded
"Current High"	Current alarm limit exceeded
"Current Low"	Current alarm limit dropped below

- 7** The opening window is a part of the Configuration window. If the parameter values from the controller have not been read, it takes longer when you open the zone configuration window for the first time. The parameter values of the selected zone are updated every 10 s.

