

# Zelio Control

RTC48

## Zelio Temperature Control Soft User Guide

04/2013

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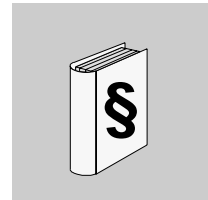
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## Safety Information



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### Important Information

#### NOTICE

Read these instructions carefully, and look at the equipment to become familiar with the device before trying to install, operate, or maintain it. The following special messages may appear throughout this documentation or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of this symbol to a Danger safety label indicates that an electrical hazard exists, which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

### **DANGER**

**DANGER** indicates an imminently hazardous situation which, if not avoided, **will result in** death or serious injury.

### **WARNING**

**WARNING** indicates a potentially hazardous situation which, if not avoided, **can result in** death or serious injury.

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 **CAUTION**

**CAUTION** indicates a potentially hazardous situation which, if not avoided, **can result in** minor or moderate injury.

***NOTICE***

***NOTICE*** is used to address practices not related to physical injury.

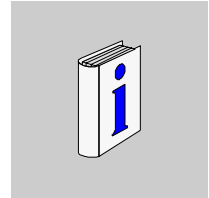
**PLEASE NOTE**

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

A qualified person is one who has skills and knowledge related to the construction and operation of electrical equipment and its installation, and has received safety training to recognize and avoid the hazards involved.

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## About the Book



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### At a Glance

#### Document Scope

This guide describes the Zelio Temperature Control Software for RTC48 temperature control. It consists of Basic and Advanced versions. Basic version enables you to edit various setting values of the RTC48 temperature control. While Advanced version enable the monitoring function for trend display.

#### Validity Note

This document is valid for the Zelio Temperature Control Soft V1.0.

#### Registered Trademarks

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#### Related Documents

Title of Documentation	Reference Number
RTC48 Temperature Controller Quick Start Guide	HRB3156801(Eng) HRB7904900 (Fre) HRB7905200 (Gre) HRB7905600 (Spa) HRB7905400 (Ita) HRB7905100 (Chs)
RTC48 Temperature Controller User Guide	EIO0000001539 (Eng) EIO0000001540 (Fre) EIO0000001541 (Gre) EIO0000001542 (Spa) EIO0000001543 (Ita) EIO0000001544 (Chs)

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RTC48 Communication and Zelio Control Soft User Guide	EIO0000001545 (Eng) EIO0000001546 (Fre) EIO0000001547 (Gre) EIO0000001548 (Spa) EIO0000001549 (Ita) EIO0000001550 (Chs)
RTCCBL Communication Cable Quick Start Guide	HRB7810401 (Eng) HRB7906300 (Fre) HRB7906500 (Gre) HRB7906700 (Spa) HRB7906600 (Ita) HRB7906400 (Chs)

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# Starting Zelio Temperature Control Soft



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## Starting the Software

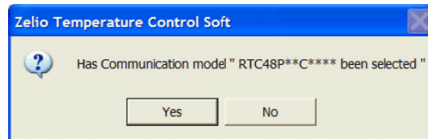
### Procedure

To start Zelio Temperature Control Soft, proceed as follows:

Step	Action
1	<p>Click <b>Start</b> → <b>All Program</b> → <b>Schneider Electric</b> → <b>Zelio Temperature Control Soft (Basic)</b>. <b>Result:</b> Zelio Temperature Control Soft starts.</p> 

## Establishing the Communication Setting

If the communication conditions are not established, the following figure appears.



If the communication model RTC48P\*\*C\*\*\* is selected, click **Yes**.

It performs the following communication conditions automatically:

- Sets the communication ports from COM1 to COM8
- Sets the instrument numbers from 0...95
- Identifies the communication speed 9600 and 19200 bps

**NOTE:** If the communication speed of the RTC48 is already set to 2400 or 4800 bps, set it to 9600 or 19200 bps. 19200 bps is recommended.

However, it may take time for the communication conditions to be established. In such cases, you can set the communication conditions and instrument numbers manually.

If the communication model RTC48P\*\*C\*\*\* is not selected, click **No**.

If the Main Display indicates all set values of the communication information, the communication conditions (Console port communication) have already been set.

Communication information	
Communication port	COM2
Communication speed	19200
Data bit, Parity	8, NONE
Stop bit	1
Instrument number	94
Communication protocol	Modbus RTU

If all values of the communication information are blank, you can do the configuration offline.

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# Zelio Temperature Control Soft User Interface

# 2

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## Overview

This chapter describes the user interface of Zelio Temperature Control Soft.

## What Is in This Chapter?

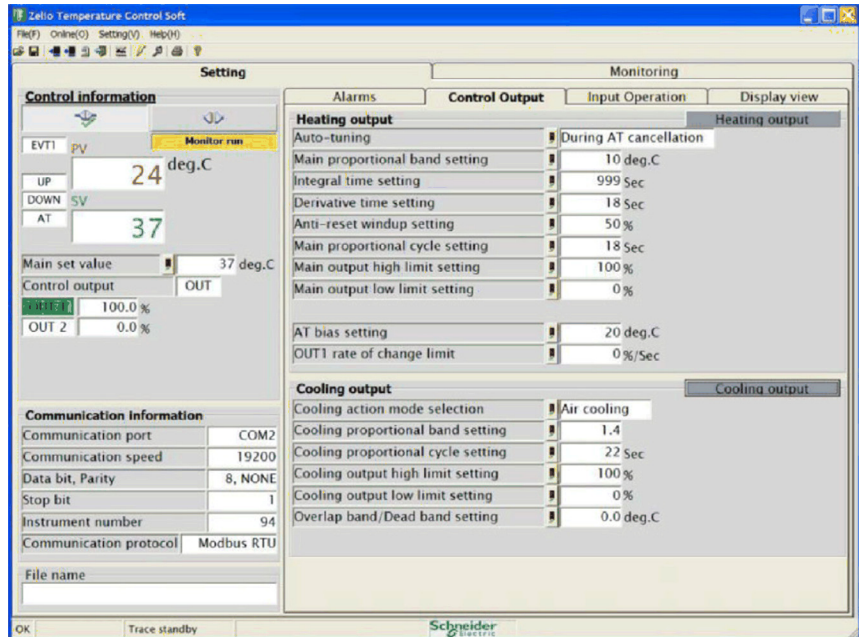
This chapter contains the following topics:

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## Main Display

### Description of the Main Display

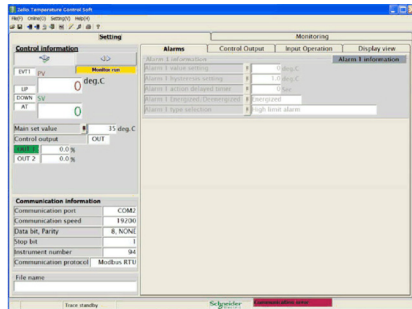
The following figure shows the Main Display:



The Control information indicates information about PV, SV, control status, alarm status, monitoring status, and so on. You can set all the parameters on the individual function tab.

If Online button is clicked while in Offline mode, The control information displays PV, SV, control status, alarm status and so on of the RTC48 connected.

If a communication error (no response) occurs while in Online mode, it displays the message "Communications error" on the bottom right of the display.



If a communication error (no response) is canceled, "Communication error" message disappears from the display.

When the monitoring is stopped, "Trace standby" message appears on the bottom left of the display.

When the monitoring is performing, "Trace Run" and "Logging" messages appear on the bottom left of the display.

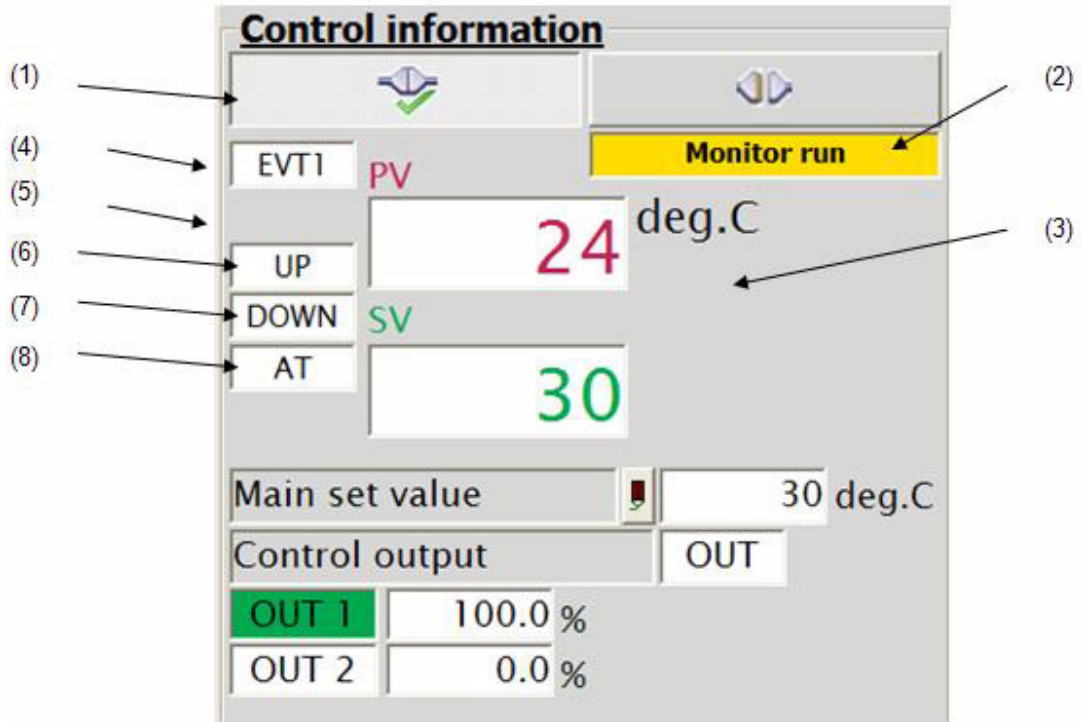
## Control Information Display

### Description of Control Information Display

The Main Display is divided into 2 sections:

- Control Information Display
- Function tab

The following figure shows the Control Information Display:



The following table describes the functions in the Control Information Display:

Item No.	Name	Description
1	Online/Offline button	Click the button to switch between Online and Offline modes or vice versa. If a communication item/parameter is changed and the Online button is clicked while offline, online communication is impossible if the changed value is different from that of the currently connected RTC48.
2	Online/Offline status	Indicates current online/offline status.
3	Monitoring status	Indicates current monitoring status.
4	Event 1 status ( <b>EVT1</b> )	Indicates event 1 being monitored. When event 1 is turned On, the <b>EVT1</b> indicator turns red. When event 1 is turned Off, the <b>EVT1</b> indicator turns white.
5	Event 2 status ( <b>EVT2</b> )	Indicates event 2 being monitored. When event 2 is turned On, the <b>EVT2</b> indicator turns red. When event 2 is turned Off, the <b>EVT2</b> indicator turns white.
6	PV Upscale status	Indicates PV upscale status being monitored.
7	PV Downscale status	Indicates PV down status being monitored.
8	Auto-tuning/Auto-reset status	Indicates Auto-tuning ( <b>AT</b> ) and Auto-reset ( <b>AR</b> ) status being monitored. When Auto-tuning is performing, the <b>AT</b> indicator turns yellow. When Auto-tuning is canceled, the <b>AT</b> indicator turns white. When Auto-reset is performing, the <b>AR</b> indicator turns yellow. When Auto-reset is canceled, the <b>AR</b> indicator turns white.

## Function Tab

### Description of the Function Tab

The Function tab includes the following tabs:

- **Alarms**
- **Control Output**
- **Input Operation**
- **Display view**

### Alarms

Click the **Alarms** tab to view and set the alarm information.

The following figure shows the **Alarms** tab:

Alarms	Control Output	Input Operation	Display view
<b>Alarm 1 information</b>			
Alarm 1 value setting	30 deg.C		
Alarm 1 hysteresis setting	1.0 deg.C		
Alarm 1 action delayed timer	0 Sec		
Alarm 1 Energized/Deenergized	Energized		
Alarm 1 type selection	Process high alarm		

It indicates the information of Alarm 1 and Alarm 2. You can set the information of Alarm 1 and Alarm 2.



## Control Output

Click the **Control Output** tab to view and set the control outputs (OUT1 - Heating output and OUT2 - Cooling output) information.

The following figure shows the **Control Output** tab:

Alarms	Control Output	Input Operation	Display view
<b>Heating output</b>		<b>Heating output</b>	
Auto-tuning		During AT cancellation	
Main proportional band setting		10	deg.C
Integral time setting		999	Sec
Derivative time setting		18	Sec
Anti-reset windup setting		50	%
Main proportional cycle setting		18	Sec
Main output high limit setting		100	%
Main output low limit setting		0	%
AT bias setting		20	deg.C
OUT1 rate of change limit		0	%/Sec
<b>Cooling output</b>		<b>Cooling output</b>	
Cooling action mode selection		Air cooling	
Cooling proportional band setting		1.4	
Cooling proportional cycle setting		22	Sec
Cooling output high limit setting		100	%
Cooling output low limit setting		0	%
Overlap band/Dead band setting		0.0	deg.C

It indicates the information of OUT1 and OUT2 and also indicates the information of PID and control settings. You can set the information of OUT1 and OUT2. However, it does not display the information if particular models are not selected.

The following table describes the **Control Output** tab:

Function	Description
<b>Heating output</b> button	Click the button once to set the heating output settings. Click the button again to prevent parameters being set.
<b>Cooling output</b> button	Click the button once to set the cooling output settings. Click the button again to prevent parameters being set.

## Input Operation

Click the **Input Operation** tab to view and set the input operation information. You can set the input type, scaling, and control action operation.

The following figure shows the **Input Operation** tab:

Alarms	Control Output	<b>Input Operation</b>	Display view
<b>Input Operation</b>			Input Operation
Set value lock selection	Unlock		
Sensor correction value setting	0.0 deg.C		
Input type selection	K(-200 to 1370 deg.C)		
Scaling high limit setting	1370 deg.C		
Scaling low limit setting	-200 deg.C		
PV filter time constant setting	0.0 Sec		
SV rise rate setting	1 deg.C/min		
SV fall rate setting	1 deg.C/min		
Direct/Reverse action selection	Heating(reverse)		
OUT/OFF key function	OUT/OFF function		
Control output OUT/OFF	Control output OUT		

## Display View

Click the **Display view** tab to view and set the 3 color display.

The following figure shows the **Display view** tab:

Alarms	Control Output	Input Operation	Display view
<b>Display view</b>			Display view
PV color range setting		<input type="text" value="2.0"/>	deg.C
Backlight time setting		<input type="text" value="0"/>	Min
Backlight selection		<input type="text" value="All are backlit."/>	
PV color selection		<input type="text" value="Orange"/>	
Indication selection when control		<input type="text" value="OFF indication"/>	

## Monitoring (only available on Zelio Temperature Control Soft Advanced version)

### General

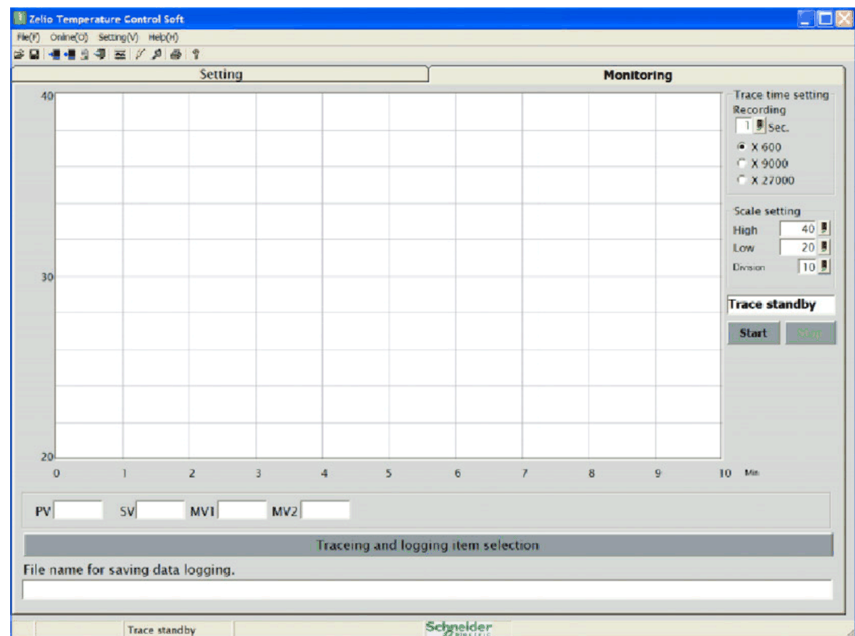
You can trace and perform data logging for the PV,SV, MV1, and MV2 parameters. When trace begins, data logging also automatically begins. It saves the logged data file with the date when logging begins.

**NOTE:** You cannot change the logging data save folder and file name.

You can select the tracing (logging) item and its color.


MV2 indicates only when Heating/Cooling control option is added.

The following figure shows the **Monitoring** tab:



### Tracing Start/Stop

#### While in Online mode

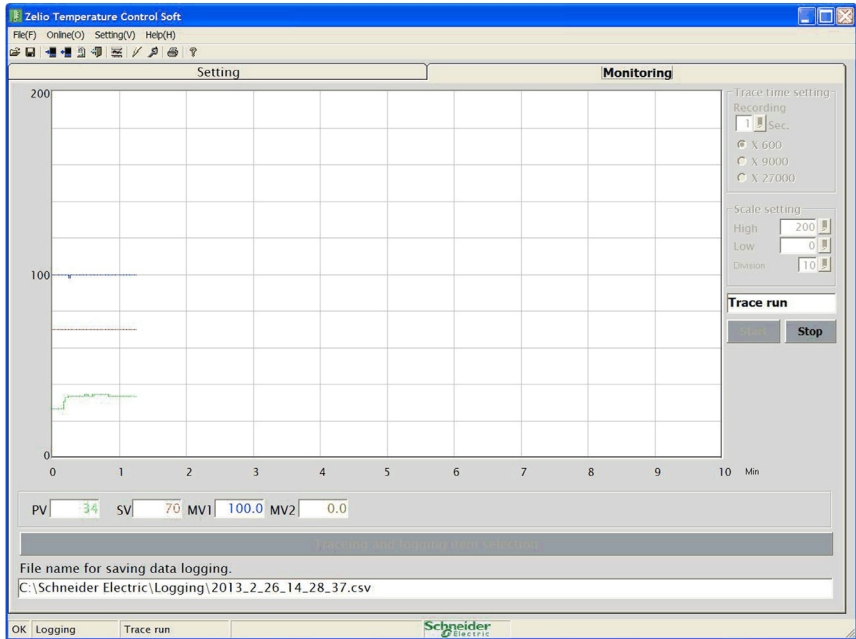
When tracing is stopped, press the Trace  icon on the tool bar or click **Online(O) → Trace(T)** on the menu to start tracing (logging).

When tracing is stopped, press the **Start** button on the Trace display to start the tracing (logging). Trace status bar shows Logging and Trace run.

If you click **Stop** button on the Trace display while tracing, tracing (logging) stops. Trace status bar shows Trace standby.



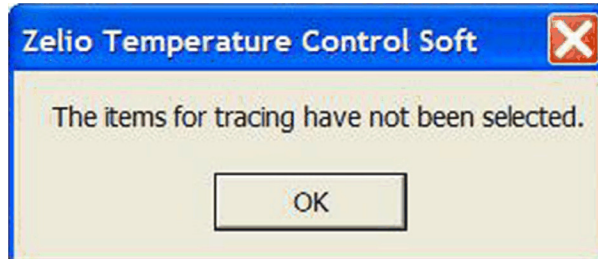
The following figure shows the trace start:



**While in Offline mode**

Tracing (logging) cannot start while in Offline mode.

If you have not selected any tracing item, the following message appears:



**Configuring Tracing Options**

To set a color for tracing, proceed as follows:

Step	Action
1	<p>Click the <b>Tracing and logging item selection</b> button on the Trace display.  <b>Result: Tracing and logging item selection</b> dialog box appears.</p>
2	Click the <b>PV color</b> , <b>SV color</b> , <b>MV1 color</b> , and <b>MV2 color</b> buttons to select the colors for the corresponding parameters.
3	Click the <b>Selection Completed</b> button to close the <b>Tracing and logging item selection</b> dialog box.

You can configure the following Tracing time settings on the Trace display:

**Tracing (logging) time setting** Sets tracing time interval.

**Tracing (logging) end time setting** Sets tracing end time.

$x \text{ 600: Recording cycle value } \times 600 = \text{Tracing (logging) end time}$

For example, if the recording cycle is set to 1 sec and tracing time scale selected is 600, the tracing (logging) will end in 10 minutes.

For example, if the recording cycle is set to 1 sec and tracing time scale selected is 9000, the tracing (logging) will end in 150 minutes.

For example, if the recording cycle is set to 1 sec and tracing time scale selected is 27000, the tracing (logging) will end in 450 minutes.

You can configure the following Tracing scale settings on the Trace display:

**High** Sets high limit value for tracing.

**NOTE:** Setting range: Trace low limit value to 10000.

**Low** Sets low limit value for tracing.

**NOTE:** Setting range: Trace low limit value to 10000

**Division** Divides the trace values between low and high limits.

**NOTE:** Setting range: 2 to 10





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# Setting the Parameters Using Zelio Temperature Control Soft

# 3

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## Overview

This chapter explains how to set the parameters using Zelio Temperature Control Soft.

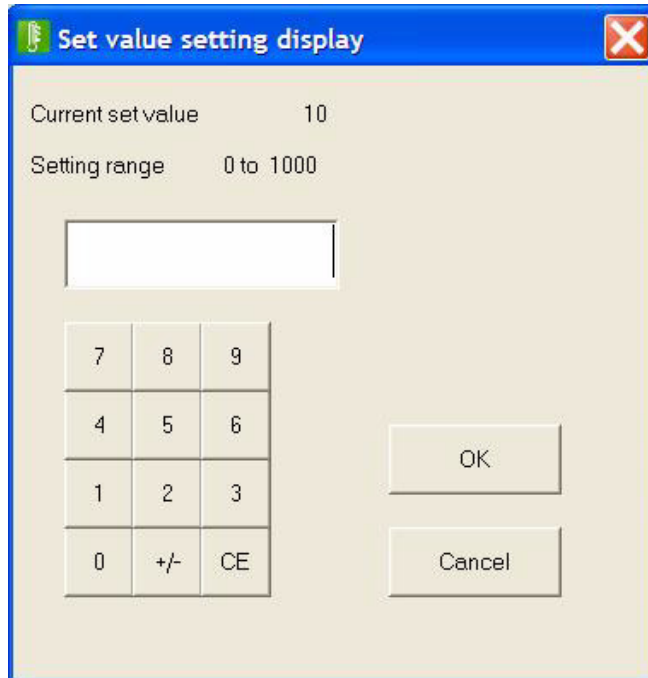
## What Is in This Chapter?

This chapter contains the following topics:

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## Set Value (SV)

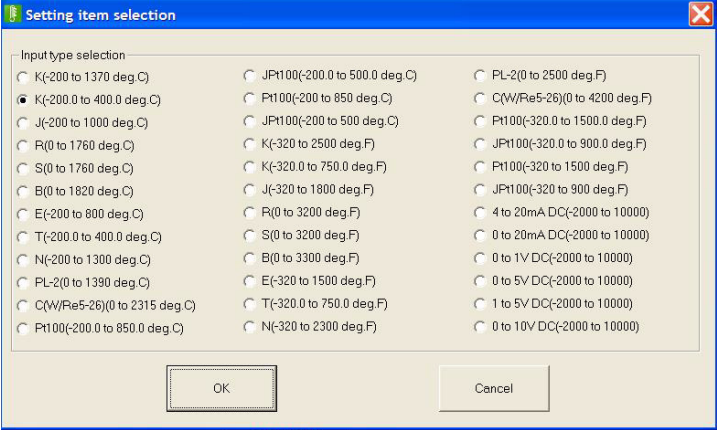
### Setting the Set Value (SV)



Step	Action
1	<p>Click the button in the <b>Main set value</b> field.</p> <p><b>Result:</b> <b>Set value setting display</b> dialog box appears with current set value and setting range on the display.</p> <p><b>NOTE:</b> You cannot set the value outside the range.</p>
2	<p>Enter a new value using numerical keypad on the screen.</p> <p><b>NOTE:</b> The decimal point indicates automatically. For example, to set the value to 70.0, enter the input 700.</p> <p>Pressing the <b>+/-</b> button makes the symbol (+/-) reverse and the <b>CE</b> button clears the value.</p> <p><b>NOTE:</b> You can enter the input values using PC keyboard.</p>
3	<p>Click <b>OK</b> after the main set value input is completed.</p> <p><b>Result:</b> It sets the set value in the RTC48 and closes the <b>Set value setting display</b> dialog box.</p> <p><b>NOTE:</b> If you click <b>Cancel</b>, it does not set the set value in the RTC48 and closes the <b>Set value setting display</b> dialog box</p>

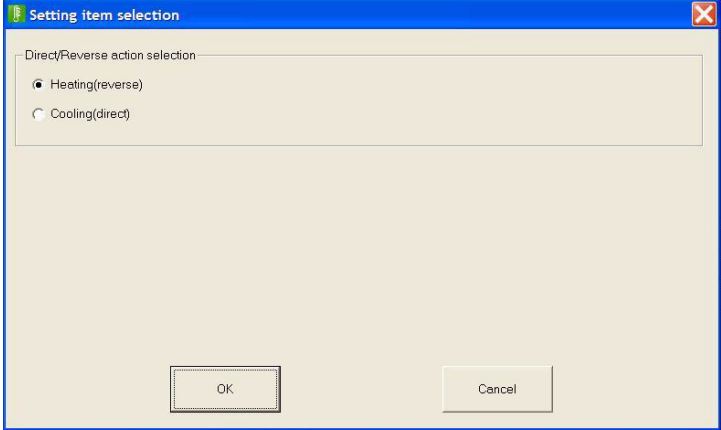
## Input Type

### Selecting the Input Type

Step	Action
1	Click the <b>Input Operation</b> tab under <b>Setting</b> tab.
2	<p>Click the button in the <b>Input type selection</b> field.  <b>Result: Setting item selection dialog box appears.</b></p> 
3	Select the desired input type.
4	<p>Click <b>OK</b>.  <b>Result:</b> It sets the selected input type in the RTC48 and closes the <b>Setting item selection</b> dialog box.  <b>NOTE:</b> If you click <b>Cancel</b>, it does not set the selected input type in the RTC48 and closes the <b>Setting item selection</b> dialog box.</p>

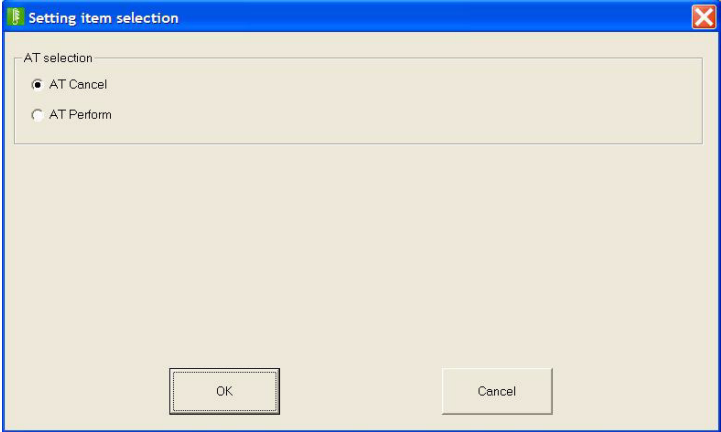
## Direct/Reverse Action

### Selecting the Direct/Reverse Action

Step	Action
1	Click the <b>Input Operation</b> tab under <b>Setting</b> tab.
2	<p>Click the button in the <b>Direct/Reverse action selection</b> field.  <b>Result: Setting item selection</b> dialog box appears.</p> 
3	Select the desired control action.
4	<p>Click <b>OK</b>.  <b>Result:</b> It sets the selected control action in the RTC48 and closes the <b>Setting item selection</b> dialog box.  <b>NOTE:</b> If you click <b>Cancel</b>, it does not set the selected control action in the RTC48 and closes the <b>Setting item selection</b> dialog box.</p>

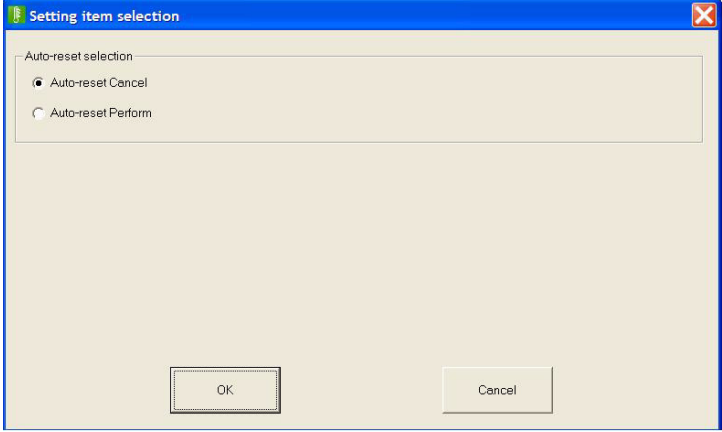
## Auto-tuning/Auto-reset

### Selecting the Auto-tuning Perform/Cancel

Step	Action
1	Click the <b>Control Output</b> tab under <b>Setting</b> tab.
2	Click the button in the <b>Auto-tuning</b> field. <b>Result: Setting item selection (PID control) dialog box</b> appears.
	
3	Select the desired action.
4	Click <b>OK</b> . <b>Result:</b> It sets the selected action in the RTC48 and closes the <b>Setting item selection</b> dialog box. <b>NOTE:</b> If you click <b>Cancel</b> , it does not set the selected action in the RTC48 and closes the <b>Setting item selection</b> dialog box.
5	Click the button in the <b>Main output ON/OFF action hysteresis</b> field to set the value.

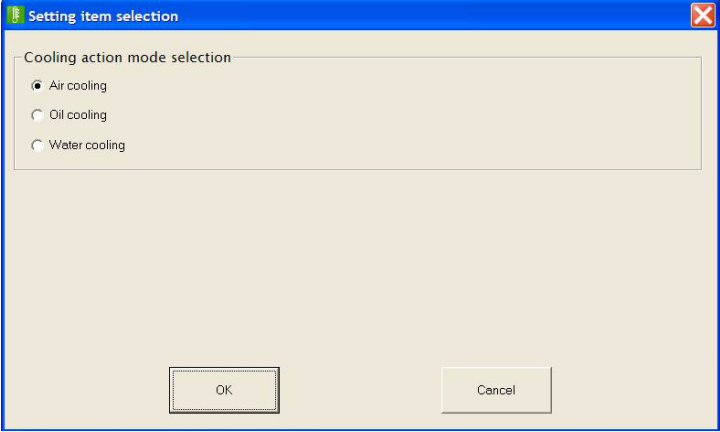
### Selecting the Auto-reset Perform/Cancel

To select the auto-reset perform/cancel, proceed as follows:

Step	Action
1	Click the <b>Control Output</b> tab under <b>Settings</b> tab.
2	Click the button in the <b>integral time setting</b> field to change the value to 0 so that the control changes to PD with auto-reset function. <b>NOTE:</b> If you click the button in the <b>derivative time setting</b> field to change the value to 0 along with <b>integral time setting</b> value as 0, the control changes to P with auto-reset function.
3	Click the button in the <b>Auto-reset</b> field. <b>Result: Setting item selection (PD, P control) dialog box appears.</b> 
4	Select the desired action.
5	Click <b>OK</b> . <b>Result:</b> It sets the selected action on the RTC48 and closes the <b>Setting item selection</b> dialog box. <b>NOTE:</b> If you click <b>Cancel</b> , it does not set the selected action on the RTC48 and closes the <b>Setting item selection</b> dialog box.
6	Click the button in the <b>Main output ON/OFF action hysteresis</b> field to set the value.

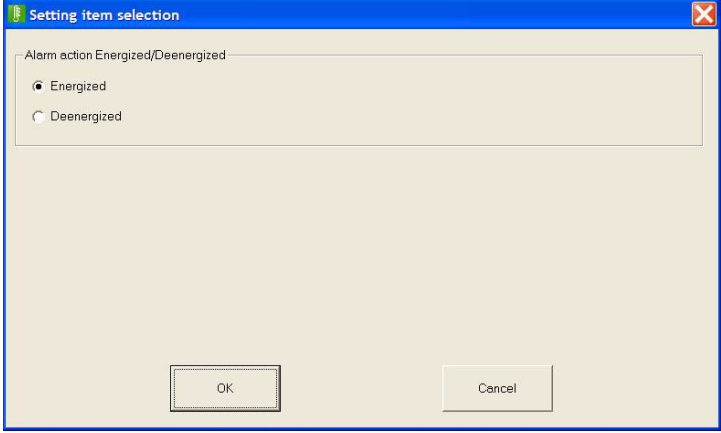
## Cooling Action Mode

### Selecting the Cooling Action Mode

Step	Action
1	Click the <b>Control Output</b> tab under <b>Setting</b> tab.
2	Click the button in the <b>Cooling action mode selection</b> field. <b>Result:</b> <b>Setting item selection</b> dialog box appears.
	
3	Select the desired cooling action.
4	Click <b>OK</b> . <b>Result:</b> It sets the selected cooling action in the RTC48 and closes the <b>Setting item selection</b> dialog box. <b>NOTE:</b> If you click <b>Cancel</b> , it does not set the selected cooling action in the RTC48 and closes the <b>Setting item selection</b> dialog box.

## Alarm 1 Energized/Deenergized

### Selecting the Alarm 1 Energized/Deenergized

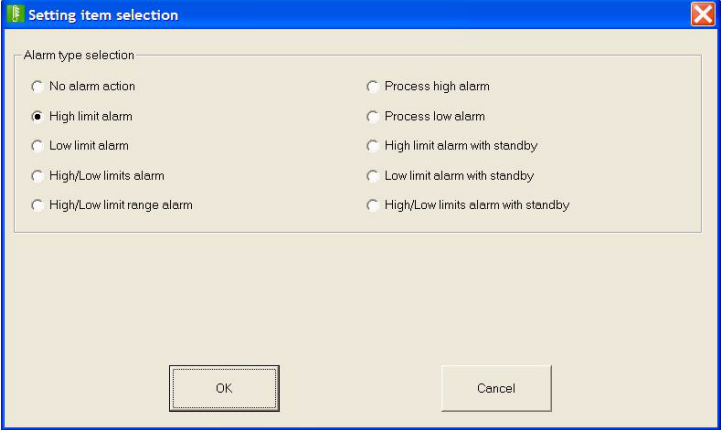
Step	Action
1	Click the <b>Alarms</b> tab under <b>Setting</b> tab.
2	Click the button in the <b>Alarm 1 Energized/Deenergized</b> field. <b>Result: Setting item selection</b> dialog box appears.
	
3	Select the desired action.
4	Click <b>OK</b> . <b>Result:</b> It sets the selected action in the RTC48 and closes the <b>Setting item selection</b> dialog box. <b>NOTE:</b> If you click <b>Cancel</b> , it does not set the selected action in the RTC48 and closes the <b>Setting item selection</b> dialog box.

**NOTE:** To select the Alarm 2 Energized/Deenergized, follow the above steps.



## Alarm 1 Type

### Selecting the Alarm 1 Type

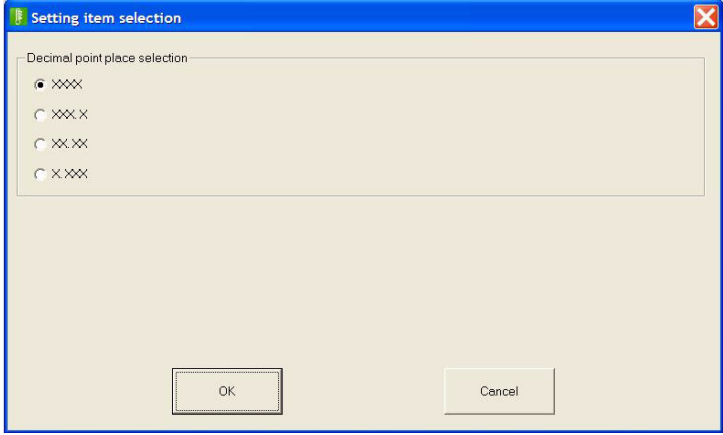
Step	Action
1	Click the <b>Alarms</b> tab under <b>Setting</b> tab.
2	Click the button in the <b>Alarm 1 type selection</b> field. <b>Result:</b> <b>Setting item selection</b> dialog box appears.
	
3	Select the desired alarm type.
4	Click <b>OK</b> . <b>Result:</b> It sets the selected alarm type in the RTC48 and closes the <b>Setting item selection</b> dialog box. <b>NOTE:</b> If you click <b>Cancel</b> , it does not set the selected alarm type in the RTC48 and closes the <b>Setting item selection</b> dialog box.

**NOTE:** To select the Alarm 2 type, follow the above steps.

## Decimal Point Place

### Selecting the Decimal Point Place

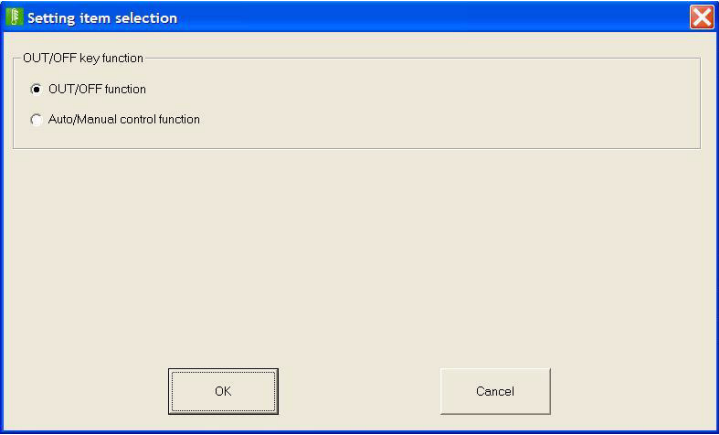
You can select the decimal point place. However, this option is editable only when the input type selected is DC input (0..20 mA, 4...20 mA, 0...1 V, 0...5 V, 1...5 V, 0...10 V).

Step	Action
1	Click the <b>Input Operation</b> tab under <b>Setting</b> tab.
2	Click the button in the <b>Decimal point place selection</b> field. <b>Result:</b> <b>Setting item selection</b> dialog box appears.
	
3	Select the desired decimal point place.
4	Click <b>OK</b> . <b>Result:</b> It sets the selected decimal point place in the RTC48 and closes the <b>Setting item selection</b> dialog box. <b>NOTE:</b> If you click <b>Cancel</b> , it does not set the selected decimal point place in the RTC48 and closes the <b>Setting item selection</b> dialog box.

## OUT/OFF Key Function

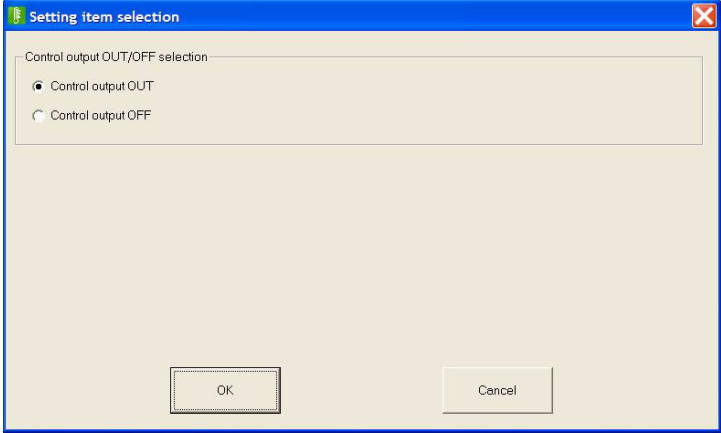
### Selecting the OUT/OFF Key Function

It selects either OUT/OFF or Auto/Manual control.

Step	Action
1	Click the <b>Input Operation</b> tab under <b>Setting</b> tab.
2	Click the button in the <b>OUT/OFF key function</b> field. <b>Result:</b> <b>Setting item selection</b> dialog box appears.
	
3	Select the desired action.
4	Click <b>OK</b> . <b>Result:</b> It sets the selected action in the RTC48 and closes the <b>Setting item selection</b> dialog box. <b>NOTE:</b> If you click <b>Cancel</b> , it does not set the selected action in the RTC48 and closes the <b>Setting item selection</b> dialog box.

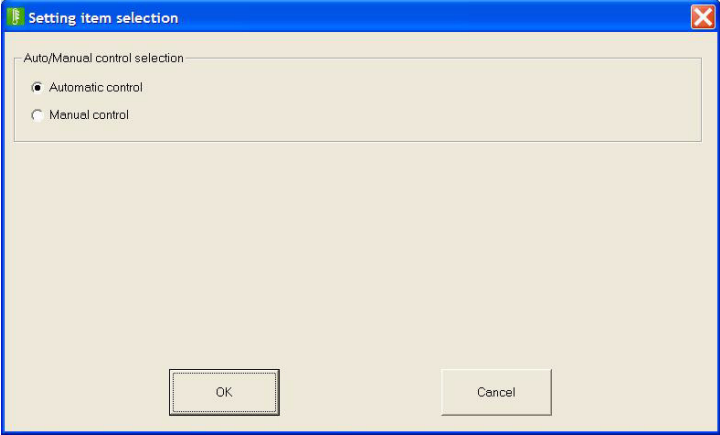
## Control Output OUT/OFF

### Selecting the Control Output OUT/OFF

Step	Action
1	Click the <b>Input Operation</b> tab under <b>Setting</b> tab.
2	<p>Click the button in the <b>Control output OUT/OFF</b> field.  <b>Result: Setting item selection</b> dialog box appears.</p> 
3	Select the desired action.
4	<p>Click <b>OK</b>.  <b>Result:</b> It sets the selected action in the RTC48 and closes the <b>Setting item selection</b> dialog box.  <b>NOTE:</b> If you click <b>Cancel</b>, it does not set the selected action in the RTC48 and closes the <b>Setting item selection</b> dialog box.</p>

## Auto/Manual Control

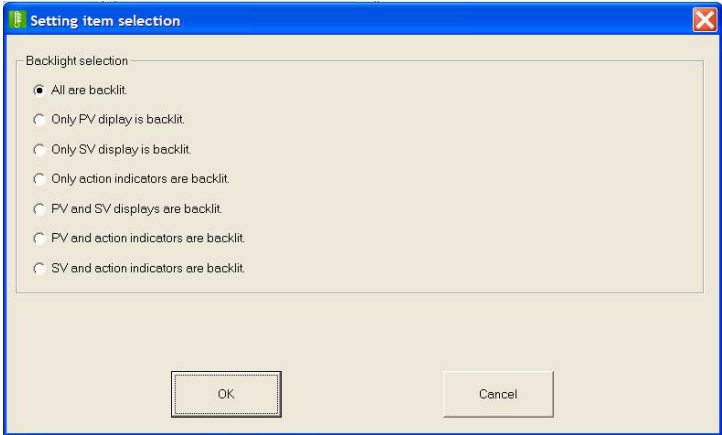
### Selecting the Auto/Manual Control

Step	Action
1	<p>Click the button in the <b>Auto/Manual control selection</b> field on the Other Information Display.</p> <p><b>Result:</b> <b>Setting item selection</b> dialog box appears.</p> 
2	Select the desired action.
3	<p>Click <b>OK</b>.</p> <p><b>Result:</b> It sets the selected action in the RTC48 and closes the <b>Setting item selection</b> dialog box.</p> <p><b>NOTE:</b> If you click <b>Cancel</b>, it does not set the selected action in the RTC48 and closes the <b>Setting item selection</b> dialog box.</p>

## Backlight Selection

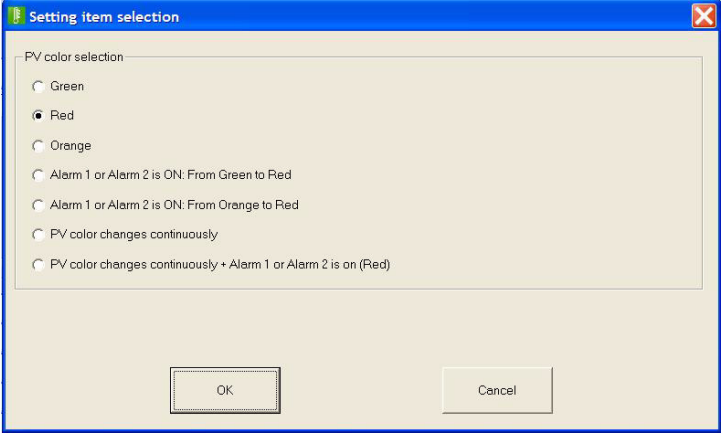
### Selecting the Backlight

You can select the display to the backlight.

Step	Action
1	Click the <b>Display view</b> tab under <b>Setting</b> tab.
2	<p>Click the button in the <b>Backlight selection</b> field.  <b>Result: Setting item selection</b> dialog box appears.</p> 
3	Select the desired display to the backlight.
4	<p>Click <b>OK</b>.  <b>Result:</b> It sets the selected display in the RTC48 and closes the <b>Setting item selection</b> dialog box.  <b>NOTE:</b> If you click <b>Cancel</b>, it does not set the selected display in the RTC48 and closes the <b>Setting item selection</b> dialog box.</p>

## PV Color Selection

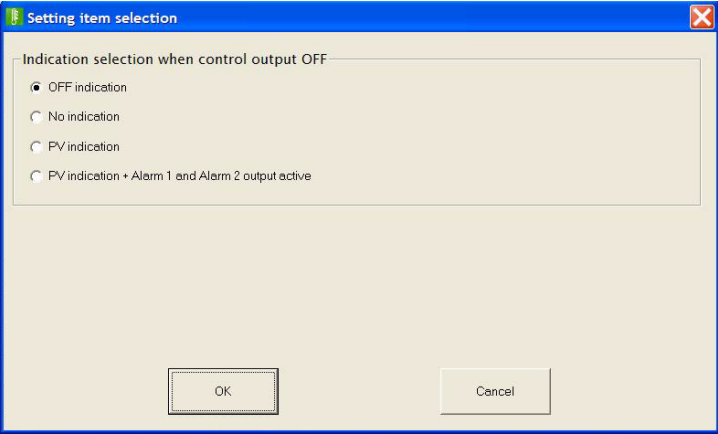
### Selecting the PV Color

Step	Action
1	Click the <b>Display view</b> tab under <b>Setting</b> tab.
2	<p>Click the button in the <b>PV color selection</b> field.  <b>Result:</b> <b>Setting item selection</b> dialog box appears.</p> 
3	Select the desired color.
4	<p>Click <b>OK</b>.  <b>Result:</b> It sets the selected color in the RTC48 and closes the <b>Setting item selection</b> dialog box.  <b>NOTE:</b> If you click <b>Cancel</b>, it does not set the selected color in the RTC48 and closes the <b>Setting item selection</b> dialog box.</p>

## Indication Selection When Control Output OFF

### Selecting the Indication Selection When Control Output OFF

When control output is OFF, you can select the indication on the PV display.

Step	Action
1	Click the <b>Display view</b> tab under <b>Setting</b> tab.
2	<p>Click the button in the <b>Indication selection when control</b> field.  <b>Result: Setting item selection</b> dialog box appears.</p> 
3	Select the desired indication.
4	<p>Click <b>OK</b>.  <b>Result:</b> It sets the selected indication in the RTC48 and closes the <b>Setting item selection</b> dialog box.  <b>NOTE:</b> If you click <b>Cancel</b>, it does not set the selected indication in the RTC48 and closes the <b>Setting item selection</b> dialog box.</p>



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# Functions



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## Overview

This chapter describes the functions of Zelio Temperature Control Soft.

## What Is in This Chapter?


This chapter contains the following topics:

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Upload and Download	42
File Save and File Load	43
All Data and All Data Display	44
Export	47
Printing	48
Monitoring	49
Communication Setting	50
Model Change	53

## Upload and Download


### Upload

To upload all setting data from currently connected RTC48 to the Main Display, proceed as follows:

Step	Action
1	<p>Click <b>File(F)</b> → <b>Upload(U)</b> menu.  <b>Result:</b> It indicates all setting data of currently connected RTC48 on the Main Display.                      Or</p> <p>Click the Upload  icon to indicate all setting data of currently connected RTC48 on the Main Display.  <b>NOTE:</b> However, this function does not work while in Offline mode.</p>

### Download

To download all setting data from the Main Display to RTC48, proceed as follows:

Step	Action
1	<p>Click <b>File(F)</b> → <b>Download(D)</b> menu.  <b>Result:</b> It sets all setting data indicated on the Main Display to the RTC48.  <b>NOTE:</b> A temporary change from Offline to Online mode occurs to download and returns to Offline mode automatically when complete.                      However, you cannot download if options and output type data of the PC are not the same as those of the RTC48.                      Or</p> <p>Click the Download  icon to set all setting data indicated on the Main Display to the RTC48.</p>

## File Save and File Load


### File Save

To save all setting data indicated on the Main Display in 1 file and to name the file, proceed as follows:

Step	Action
1	Click <b>File(F)</b> → <b>File save(S)</b> menu. <b>Result:</b> It saves all setting data indicated on the Main Display in a 1 file and names the file ( <i>xxx.dat</i> ) of a folder randomly. <b>NOTE:</b> This function works while in Online and Offline modes.

### File Load


To load all setting data saved in a folder and to set to the Main Display, proceed as follows:

Step	Action
1	Click <b>File(F)</b> → <b>File load(L)</b> menu. <b>Result:</b> It loads all setting data saved in a folder and sets to the Main Display. <b>NOTE:</b> This function does not work while in Online mode.  However, click the Download  icon to set the loaded data on the currently connected RTC48. If the file is loaded successfully, the executed file name ( <i>xxx.dat</i> ) appears in the <b>File name</b> field.

## All Data and All Data Display

### All Data

To indicate all setting data of currently connected RTC48 on the Main Display, proceed as follows:

Step	Action
1	<p>Click <b>File(F)</b> → <b>All Data(D)</b> menu.  <b>Result:</b> Main Display refreshes with all parameters of currently connected RTC48. Refer to the figure below.                      Or</p> <p>Click the All Data  icon to indicate all setting data of currently connected RTC48 on the Main Display.</p>

The following figure shows the Main Display with parameters:

H2I Relays

Schneider Electric South East Asia (HQ) Pte Ltd.

10 Ang Mo Kio St. 65 #02-01/06 TechPoint Singapore 569059






## RTC Zelio Temperature Control Soft

### Parameter

Data Item	Data	Unit
Alarm 1 value setting	0	deg.C
Alarm 1 hysteresis setting	1.0	deg.C
Alarm 1 action delayed timer setting	0	Sec
Alarm 1 Energized/Deenergized	Energized	
Alarm 1 type selection	High limit alarm	
Main proportional band setting	0	deg.C
Main output ON/OFF action	1.0	deg.C
OUT1 rate of change limit	0	%/Sec
Overlap band/Dead band setting	0.0	deg.C
Cooling output ON/OFF action	1.0	deg.C
Main set value	35	deg.C
Set value lock selection	Unlock	
Sensor correction value setting	0.0	deg.C
Input type selection	K(-200 to 1370	deg.C)

## All Data Display

The following figure shows the options on the Main Display:

Options	Name	Description
	Printing of the report	You can print all data display.
	Export of the report	You can export data in the following file formats: <ul style="list-style-type: none"> <li>● HTML file (*.htm, *.html)</li> <li>● Text file(*.txt)</li> <li>● Unicode HTML file (UTF-8) (*.htm, *.html)</li> <li>● Unicode (*.txt)</li> </ul>
Zoom <input type="text" value="100%"/>	Zoom	You can change the display view of the report.
	First page	Indicates the first page of the report.
	Goto page	You can goto the previous page or next page or designated page.
	Last page	Indicates the last page of the report.

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## Export

### Procedure

To export the set value data, proceed as follows:

Step	Action
1	Click <b>File(F)</b> → <b>Export(E)</b> menu. <b>Result:</b> It exports the set value data with the CSV file.

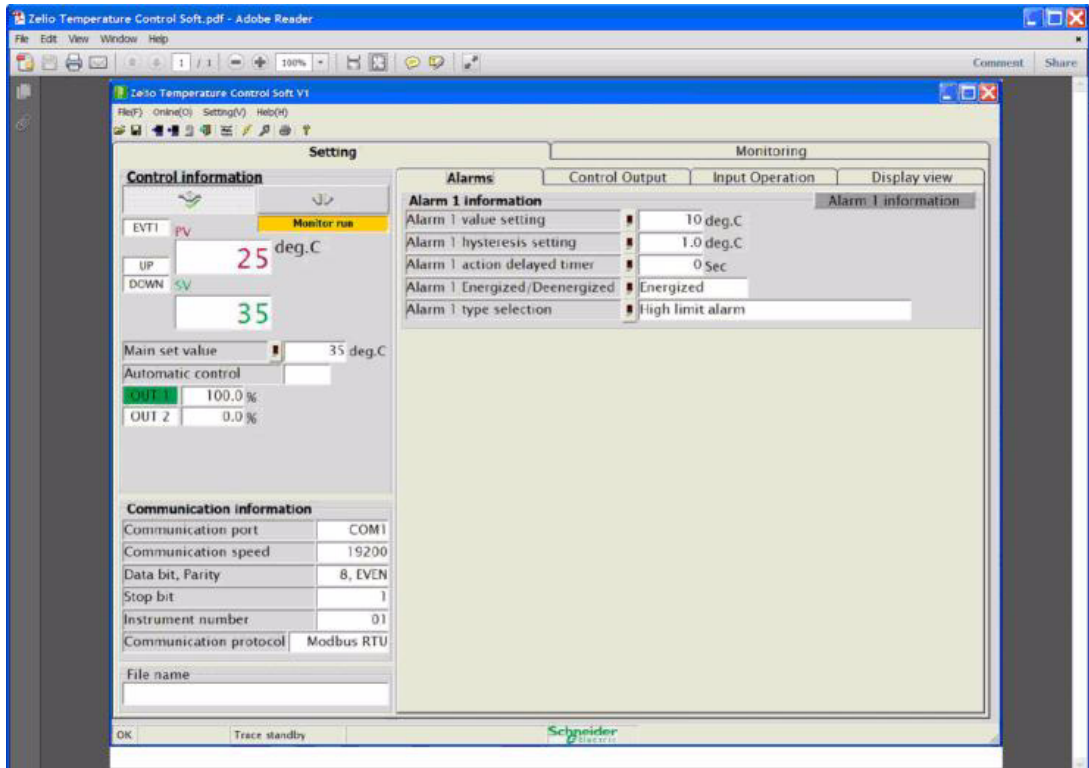
## Printing

### Procedure

To print an information, proceed as follows:

Step	Action
1	Click the information display that you need to print.
2	Click <b>File(F)</b> → <b>Print(P)</b> menu. <b>Result:</b> It prints the selected information display based on the printer selected. Refer to the figure below. <b>NOTE:</b> You can print the RTC48 console software display based on the printer selected.

The following figure shows the RTC48 Console software display with the alarm information selected in the pdf format:





## Monitoring

### Procedure

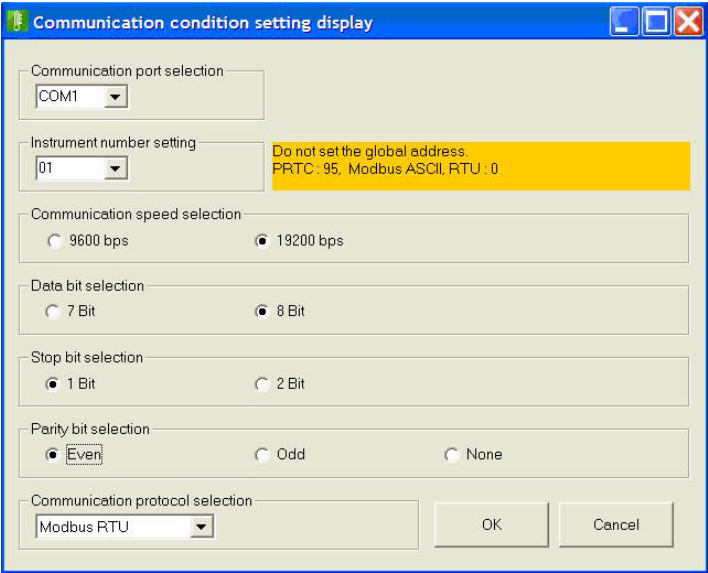


To trace the selected parameters, proceed as follows:

Step	Action
1	<p>Click <b>Online(O)</b> → <b>Trace(T)</b> menu to start the tracing. <b>NOTE:</b> However, this function does not work while in Offline mode.</p> <p>Or</p> <p>Select the Trace  icon to start the tracing. You can see the tracing in <b>Monitoring</b> tab.</p>

## Communication Setting

### Procedure

To set the communication setting, proceed as follows:

Step	Action
1	<p>Click <b>Setting(V)</b> → <b>Communication setting(C)</b> menu.  <b>Result: Communication condition setting display</b> dialog box appears.</p>  <p><b>NOTE:</b> You can manually set the communication conditions. However, this function does not work while in Offline mode.</p> <p>Or</p>  <p>Click the Communication setting  icon to set the communication parameters.</p>
2	<p>Select the required communication port (COM1 to COM8) from the <b>Communication port selection</b> list.</p>
3	<p>Select the required instrument number from the <b>Instrument number setting</b> list.  <b>NOTE:</b> (95 corresponds to PRTC protocol and 0 corresponds to Modbus ASCII/RTU. When the controller station is not set, the RTC48 does not respond even if the communication command is sent. Therefore, do not set the controller address.</p>
4	<p>Click the required communication speed in the <b>Communication speed selection</b> section.</p>

Step	Action
5	Click the required data bit in the <b>Data bit selection</b> section.
6	Click the required stop bit in the <b>Stop bit selection</b> section.
7	Click the required parity bit in the <b>Parity bit selection</b> section.
8	Select the required communication protocol from the <b>Communication protocol selection</b> list. <b>NOTE:</b> Do not select PRTC (Production Protocol) as communication protocol. It is used for production.
9	Click <b>OK</b> . <b>Result:</b> Communication with the RTC48 begins with the conditions manually set. After communication conditions are set, it indicates the set values in the <b>Communication information</b> section of the Main Display. <b>NOTE:</b> If you click <b>Cancel</b> , it discards the manually set communication conditions and closes the <b>Communication condition setting display</b> dialog box.

If communication conditions are not set, the following message appears:



In this case, set the communication conditions manually again.

### Checking the Communication Port (Windows XP)

To check the communication port on the PC with Windows XP operating system, proceed as follows:

Step	Action
1	Click <b>Start</b> → <b>Control Panel</b> . <b>Result:</b> <b>Control Panel</b> dialog box appears.
2	Click <b>Performance and Maintenance</b> . <b>Result:</b> <b>Performance and Maintenance</b> dialog box appears.
3	Click <b>System</b> . <b>Result:</b> <b>System Properties</b> dialog box appears.
4	Click <b>Hardware</b> tab.
5	Click <b>Device Manager</b> . <b>Result:</b> <b>Device Manager</b> dialog box appears.
6	Double-click <b>Ports (COM &amp; LPT)</b> . <b>Result:</b> Current communication port appears.

### Checking the Communication Port (Windows 2000)

To check the communication port on the PC with Windows 2000 operating system, proceed as follows:

Step	Action
1	Click <b>Start</b> → <b>Setting</b> → <b>Control Panel</b> . <b>Result:</b> <b>Control Panel</b> dialog box appears.
2	Click <b>System</b> . <b>Result:</b> <b>System Properties</b> dialog box appears.
3	Click <b>Hardware</b> tab.
4	Click <b>Device Manager</b> . <b>Result:</b> <b>Device Manager</b> dialog box appears.
5	Double-click <b>Ports (COM &amp; LPT)</b> . <b>Result:</b> Current communication port appears.

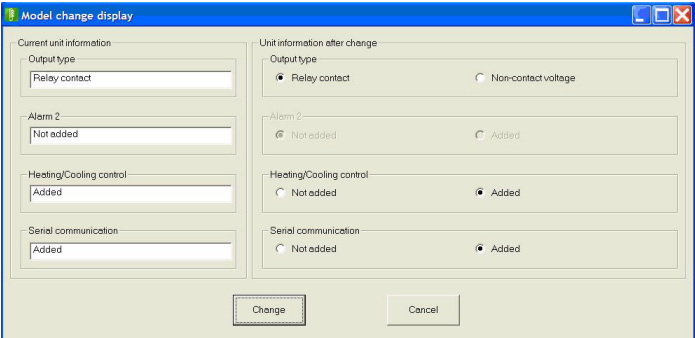

## Model Change

### Procedure

You can indicate the new settings on the Main Display.

When currently set specifications displayed on an added controller differ from the currently connected RTC48, set the specifications again on the Main Display to match. If the specifications do not match, it does not indicate some settings or indicates unnecessary items. The settings are operable while in Offline mode.

To change the current settings/specifications, proceed as follows:

Step	Action
1	<p>Click <b>Setting(V)</b> → <b>Model change(O)</b> menu.  <b>Result: Model change display</b> dialog box appears indicating the current unit information and unit information after change.</p> 
	<p>Or</p>  <p>Click the Model Change icon.  <b>Result: Model change display</b> dialog box appears indicating the current unit information and unit information after change.</p>
2	Click the required option in the <b>Output type</b> section.
3	Click the required option in the <b>Alarm 2</b> section.
4	Click the required option in the <b>Heating/Cooling control</b> section.
5	Click the required option in the <b>Serial communication</b> section.
6	<p>Click <b>OK</b> to save the changes and close the <b>Model change display</b> dialog box.  <b>NOTE:</b> If you click <b>Cancel</b>, it cancels the changes and closes the <b>Model change display</b> dialog box.</p>

**NOTE:** Even if online status is enabled and if settings are different from those of the currently connected RTC48, online communication is impossible.

