

Automation System TROVIS 5500
Room Panel
TROVIS 5570



Mounting and Operating Instructions

EB 5570 EN

Firmware version 1.0x
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Safety instructions




- ▶ The device may only be assembled, started up and operated by trained, experienced personnel familiar with the product. Proper shipping and appropriate storage are assumed.
- ▶ Safety functions such as excess temperature protection or frost protection are not available if power has failed, "manual operation" has been selected on the heating and district heating controller or if any fault has occurred.



Contents

1	Operation	4
1.1	Operating elements	4
1.2	Displaying data	5
1.3	Selecting the operating mode	6
1.4	Setting the data	7
1.4.1	Setting the clock	7
1.4.2	Setting the times of use	8
1.4.3	Setting the temperature set points	9
1.4.4	Setting the party mode	9
2	Start-up	10
2.1	Calibrating the room sensor	11
3	Installation	11
4	Electrical connection	12
5	Technical data	12




1 Operation

The room panel, a remote room controller, will be ready for use after it has been connected and started up. If the phone icon  located in the top left-hand corner flashes, repeat the start-up procedure (-> p. 10).









1.1 Operating elements

-  **Arrow keys (up and down keys)**
Are used to select data and parameters.
-  **Manual key**
Is used to switch between the operating modes.

Additional operating elements accessible with the cover open









-  **Enter key**
Is used to confirm a selection or setting.
-  **Switch-over key**
Is used to switch between the operating and parameter levels.
-  **Party key**
Is used to adjust the party timer (to prolong or start rated operation).

Note that you require a slim object such as a ball-point pen in order to press the following keys:

-  **Telegram key**
 Is used to register the room panel with the associated heating and district heating controller (start-up).
-  **Communication key**
 Is used to determine the device bus address (start-up).
-  **Reset key**
 Is used to reset the room panel to default values (delivery state). Pressing the reset key requires the room panel to be started up again.
-  **Correction key**
 Is used to calibrate the room sensor (-> section 2.1).

1.2 Displaying data

The data are displayed in turn on each press of the \uparrow key. Use the \downarrow key to display the data in reverse order. The arrow (data indicator) at the top of the display indicates the data selected, by pointing to the corresponding icon printed on the housing of the room panel. It is recommended that the desired data be selected with the cover closed to ensure that the data displayed are assigned to the appropriate icons.

Data	Icons with the cover closed	Icons with the cover open
Data 1	 = Clock	
Data 2	 = Room temperature	
Data 3	 = Outdoor temperature	
Data 4	 = Party mode	

Data 1: Clock _ : _ _

Operating mode When * is displayed = rated operation
 When no symbol is displayed = reduced operation

Times of use ▲ Time of use
 ▼ Time of non-use

Data 2: Room temperature _ . _ _

Day/night set point _ . _ _ (displayed in a smaller font in the bottom
 right-hand corner)

Data 3: Outdoor temperature _ . _ _ 

Data 4: Party timer _ : _ _

In addition to these four data, up to ten further process data received from the connected heating and district heating controller (i.e. a maximum of five measured temperature values and five dimensionless values) can be displayed provided that the appropriate setting of the controller has been selected previously.

Measured temperature values 1 to 5: _ . _ _  ₁ to _ . _ _  ₅

Dimensionless values 1 to 5: _ . _ _ ₁ to _ . _ _ ₅

Important!

If the phone icon  flashes in the top left-hand corner, the connection to the heating and district heating controller is faulty.

1.3 Selecting the operating mode

Press the  key repeatedly to cycle through the following operating modes:

Rated operation (day): * and ; ▲▲▲▲▲...

The day set point (rated operation) will be continuously maintained regardless of the programmed times of use.

Reduced operation (night): ; ▼▼▼▼▼...

The night set point (reduced operation) will be continuously maintained regardless of the programmed times of use.

Standby operation:  and ; ▼▼▼▼▼...

Control will be switched off.

Automatic operation: * will be displayed during times of use, no symbol will be displayed during times of non-use; ▼...▲...▼

Rated operation will be activated during the programmed times of use, and reduced operation will be activated outside the times of use provided that the control operation has not been switched off depending on the outdoor temperature. The controller will automatically switch between the two operating modes.

Note!

The operating mode selected on the room panel will only be adopted by the heating and district heating controller if the heating and district heating controller is set to "automatic operation." Otherwise, after a few seconds, the room panel will again display the operating mode as set in the heating and district heating controller.

1.4 Setting the data

The room panel allows for direct setting of the clock, times of use, day set point, night set point and party mode in the parameter level.

Note!

If the user fails to press a key for two minutes, the room panel will leave the parameter level.

1.4.1 Setting the clock


Proceed as follows:

- Open the cover.
- ⇒ Press this key to enter the parameter level.
The arrow (data indicator) at the top of the display will point to ☹.
The display will show the time.
- * Press this key to enter the editing mode.
- ↑ Edit the time.
- * Confirm the time.
The display will show the year.
- ↑ Edit the year.
- * Confirm the year.
The display will show the date.
- ↑ Edit the date.
- * Confirm the date.
The display will show the day set point.
- ⇒ Leave the parameter level.

1.4.2 Setting the times of use

Three times of use can be programmed for each day of the week. If one time of use is not required, be sure that the start and stop times are adjusted to identical values.

Proceed as follows:

- Open the cover.
- ⇒ Press this key to enter the parameter level.
The arrow (data indicator) at the top of the display will point to ☺.
The display will show the time.
- ↑ Press this key using single key presses until the arrow at the top of the display will point to  ☺ and the display will show 1-7 (= daily). Further pressing of this key will toggle through the days of the week: 1 = Monday, 2 = Tuesday, ..., 7 = Sunday.
- * Press this key to enter the editing mode.
The start time of the first time of use will be displayed.
- ↑ Edit the start time (in 15-minute increments).
- * Confirm the start time.
The stop time of the first time of use will be displayed.
* will flash.
- ↑ Edit the stop time.
- * Confirm the stop time.
The start time of the second time of use will be displayed.





Repeat the instructions highlighted in gray to set the second and third times of use.

After having set all times of use:

- ⇒ Leave the parameter level.

1.4.3 Setting the temperature set points

The day set point specifies the room temperature to be maintained during rated operation. The night set point specifies the room temperature to be maintained during reduced operation. When adjusting the set points in the parameter level, the following applies:


Parameter	Arrow points to	Display
Day set point		---: / * , 
Night set point		---: / 

Proceed as follows:

- Open the cover.
- ⇒ Press this key to enter the parameter level.
The arrow (data indicator) at the top of the display will point to ⊕.
The display will show the time.
- ↑ Select the desired temperature set point.
- * Press this key to enter the editing mode.
- ↑ Edit the temperature set point.
- * Confirm the temperature set point.
- ⇒ Leave the parameter level.

1.4.4 Setting the party mode

You can use the party mode to extend the current time of use for rated operation or to start rated operation when the controller is still in reduced operation, by specifying the desired party time for the party mode. When the programmed party time has elapsed, the display of the party mode will be reset to 00:00.

- Open the cover.
-  Press this key to enter the editing mode.
- ↑ Edit the desired duration of the one-off time of use (minutes will change in 15-minute increments).
- * Confirm the duration of the one-off time of use.
- ⇒ Leave the parameter level.

2 Start-up

The TROVIS 5570 Room Panel is intended to be used in combination with a heating and district heating controller from the TROVIS 5500 Series.

The start-up of the room panel requires the heating and district heating controller to be configured as specified below. Refer to the respective mounting and operating instructions for detailed information on how to configure the TROVIS 5575 Controller (EB 5575 EN), TROVIS 5576 Controller (EB 5576 EN) or TROVIS 5579 Controller (EB 5579 EN).



Configuration of the heating and district heating controller from the TROVIS 5500 Series

Functions	Default	Configuration
Device bus	0	CO7 -> F01 - 1
	32	Device bus address / Auto*, 1...32
TROVIS 5570 Room Panel in Rk1 (Rk2, Rk3)	0	CO7 -> F03 - 1
		(CO7 -> F04 - 1, CO7 -> F05 - 1) Choice: Auto**
* Auto = automatically searches for a free device bus address in the system		
** Auto = automatically searches for a room panel in enabled identifying mode		

Proceed as follows:

For the heating and district heating controller: adjust the above-mentioned configuration.

For the room panel:

-  Initiate start-up.
The room panel will display: 6 – 32.
- ↑ Adjust the device bus address.
E.g. 6 – 02 for device bus address 2.
- ✳ Confirm the device bus address.
The display will flash the time.
-  Press this key to transmit the identifying code to the heating and district heating controller and to establish communication between the room panel and the heating and district heating controller. The room panel will directly receive and adopt the time and further information from the heating and district heating controller.

Important!

If the phone icon  flashes in the upper left-hand corner, start-up has not been carried out properly and must be repeated.

2.1 Calibrating the room sensor

If the temperature displayed by the room panel does not correspond with the actual room temperature, the value measured by the room sensor can be changed and readjusted. When calibrating the room sensor, change the currently displayed sensor value to the reference value, i.e. the directly measured room temperature.

Note!

If calibration has not been carried out properly, incorrect room temperature values will be measured, leading to a poor control behavior. A high-precision thermometer will be required to determine the reference value.

Proceed as follows:

- ↕ Press the correction key.
- ↑ Adjust the determined temperature difference.
- ✱ Confirm the temperature difference.

3 Installation

Note!

Install the room panel 1.50 m above the floor.

In order to ensure proper operation of the room panel, do not locate it in a place where it could be exposed to heat sources, such as close to radiators, lights and electrical devices, or in a place where it could be exposed to draughts, such as close to doors or windows. The room panel must not be covered by curtains or furniture.

4 Electrical connection

Prior to connecting the room panel to the heating and district heating controller, route two wires (or four wires including two wires for the power supply) in the building.

When connecting the devices, there is no particular polarity requirement.

Connecting to the TROVIS 5575 Heating and District Heating Controller:

Connect terminals 5 and 6 of the room panel to terminals 14 and 15 of the controller device bus. The power supply of the room panel (terminals 1 and 2 of the room panel (12 to 26.5 V AC/15 to 36 V DC)) is to be provided by the customer.

Connecting to the TROVIS 5576 or TROVIS 5579 Heating and District Heating Controller:

Refer to Fig. 1.

5 Technical data

Interface Device bus	RS-485 interface for connection to controllers from the TROVIS 5500 Series (two-wire, polarity-insensitive connection)
Operating voltage	15 to 36 V DC (polarity insensitive) 12 to 26.5 V AC, 48 to 62 Hz
Ambient conditions	0 to 50 °C (operation) -10 to 60 °C (storage and transport) 95 % rF, non-condensing
Degree of contamination	2 according to VDE 0110
Noise immunity	According to EN 61000-6-1
Noise emission	According to EN 61000-6-3
Dimensions in mm Width x height x depth	113 x 91 x 30

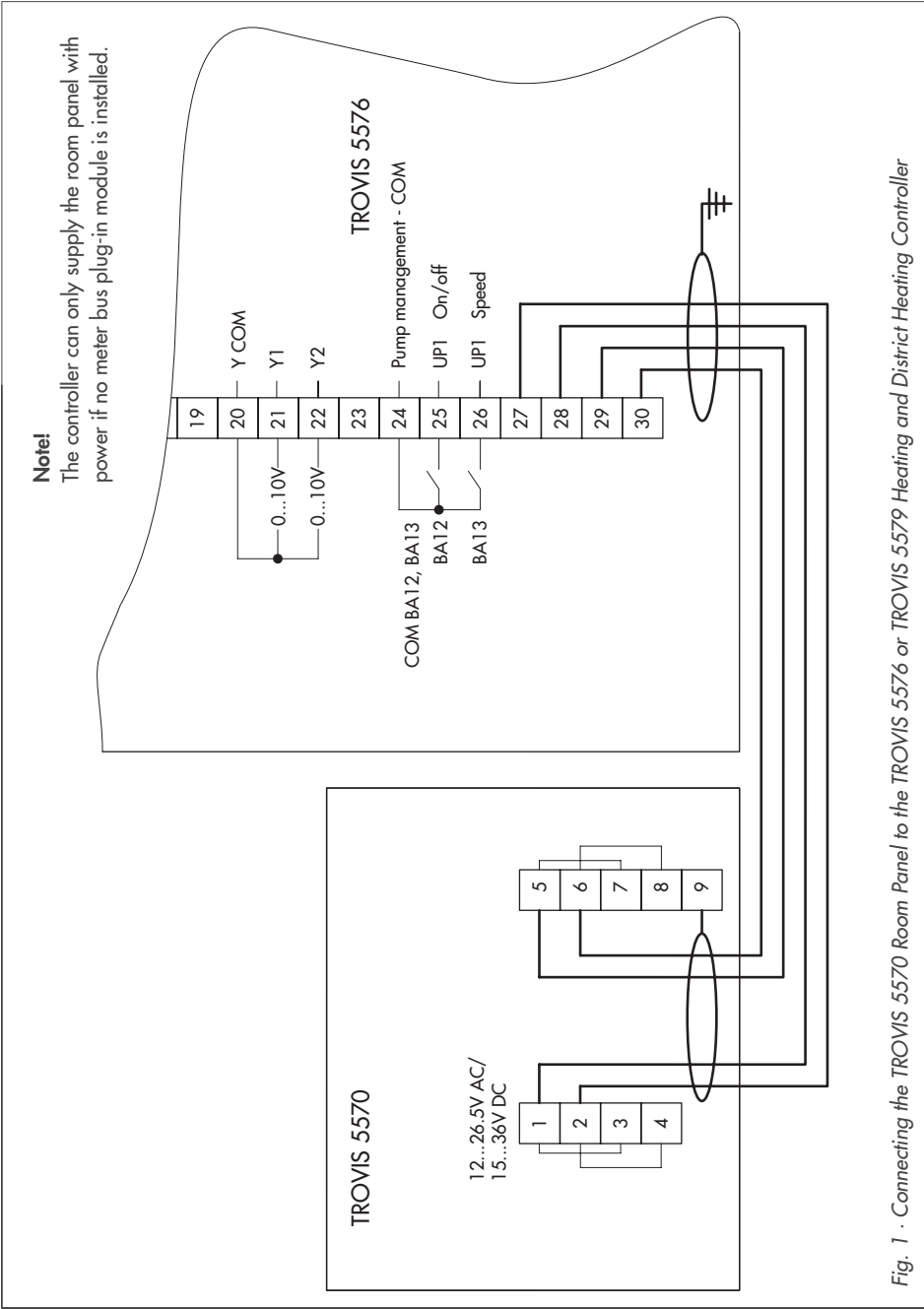


Fig. 1 · Connecting the TROVIS 5570 Room Panel to the TROVIS 5576 or TROVIS 5579 Heating and District Heating Controller



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