



DH E RT3 / BW (OCD6-1999-SLP3) User Manual

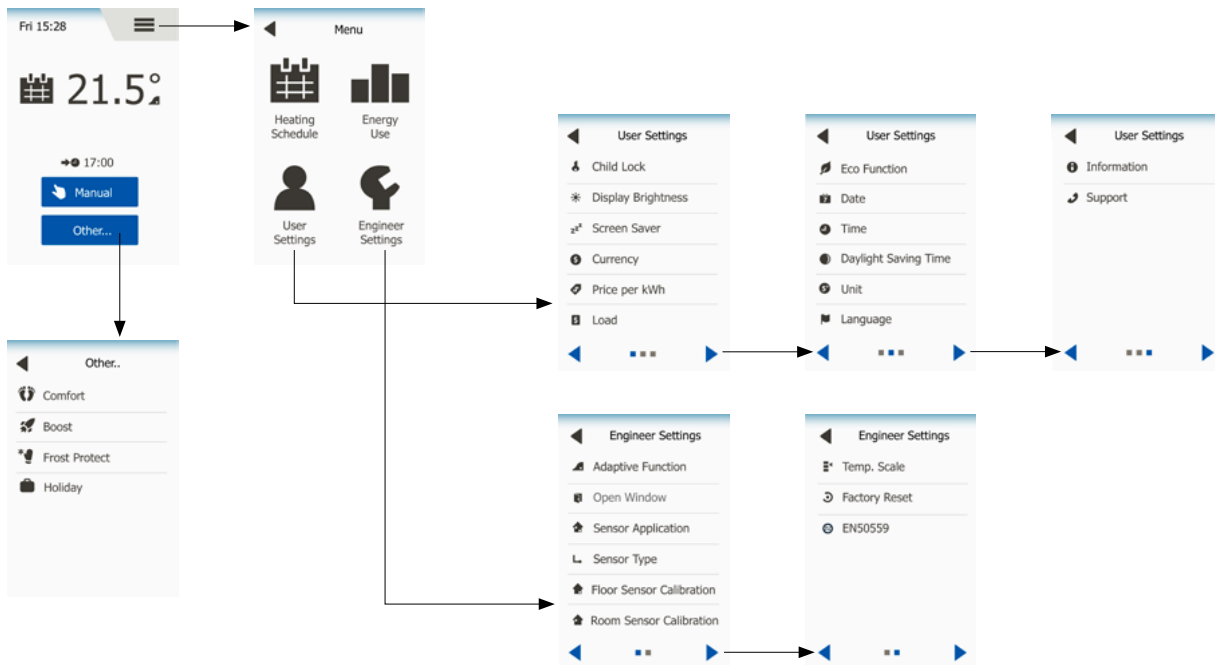
English

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Menu Overview



Introduction



Thank you for buying our touch thermostat. We hope you will enjoy the ease of use offered by the touchscreen and intuitively designed interface. You can program the thermostat any way you want with the options provided under Heating Schedule and User Settings.

The thermostat will switch on your heating system at predetermined times each day of the week. You can set individual temperatures for up to six separate periods, called events, for each day of the week. Lowering the temperature when your home is unoccupied will reduce your energy costs without reducing comfort.

The thermostat comes with a preset heating schedule suitable for most homes. Unless you change the settings, the thermostat will operate according to this preset heating schedule.

The thermostat features an adaptive function that automatically changes heating start times to ensure that the required temperature has been reached at the beginning of any specific event. After a few days, the adaptive function will have learned how much earlier the heating must be switched on.

The resistive touchscreen only requires a soft tap with your fingertip to register the touch. In this manual, the touch areas on the screen will be referred to as buttons.

Startup Wizard 1/2



When the system has been installed and turned on for the first time, or after you have performed a factory reset, you must set Region, Language, Date, Time and Floor Type.

The thermostat will automatically guide you through the process.

Region – choose preset settings for the thermostat.

Each region contains several different settings. The settings can be altered later in the various menus.

1. Choose the setting you prefer.
2. Use the “**Arrow Right**” and “**Arrow Left**” buttons to view more options.
3. Tap the “**Right**” button to go to the next setting.

Language – set the language to be used by the thermostat.

4. Choose the language you prefer.
5. Use the “**Arrow Right**” and “**Arrow Left**” buttons to view more options.
6. Tap the “**Right**” button to go to the next setting.

Date – set the current date.

7. Use the “**Up**” or “**Down**” button to set the day, month and year.
8. Choose the date format: DD-MM-YYYY or MM-DD-YYYY.
9. Tap the “**Right**” button to go to the next setting.

Startup Wizard 2/2



Time – set the current time.

10. Use the “**Up**” or “**Down**” button to set the hours and minutes.
11. Choose the time format: 24 hours or 12 hours AM/PM.
12. Tap the “**Right**” button to go to the next setting.

Floor Type – set your floor type.

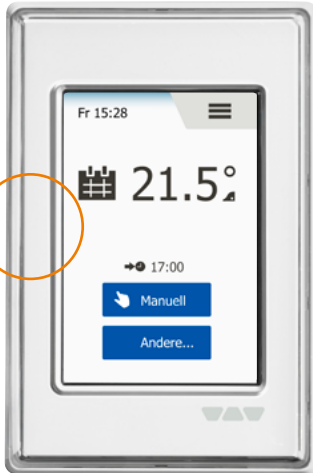
13. Choose between:
 - Tile: floors made of tile or stone.
 - Soft Floor: wooden or other engineered floors.
14. Confirm your choice with “**√**”.

The thermostat is now ready for use and will control the underfloor heating according to the preset heating schedule.

If you want to change the heating schedule, instructions are given in the section titled “**Heating Schedule**”.

Details of the preset heating schedule are given in the section titled “**Factory Settings**”.

General Operation



The thermostat has an ON/OFF switch on the left side of the thermostat.

Otherwise, the thermostat is intuitively operated via the high-resolution colour touchscreen, which is used to navigate through the menus and to change the settings.

Navigation Buttons











The thermostat has navigation buttons, facilitating use and navigation through the various menus.









1. “**Up**” or “**Down**” buttons – Allow you to change the setting.
2. Confirm button “**√**” – Saves the new setting in the thermostat.
3. Cancel button “**X**” – Cancels the setting change and returns to the previous menu.
Note: Using “Cancel” results in all unsaved settings being discarded.
4. Exit/back button “**Back Arrow**” – Exits the actual menu and returns to the previous menu. You will find “**Back Arrow**” in the top left corner of the screen.
5. Next/previous page “**Arrow left**” and “**Arrow right**” – Allow you to toggle between screens.









To return to the home screen, tap “**Back Arrow**” or “**X**” once or multiple times depending on where you are in the menu structure.

Icons 1/2




















Picture of icon:	Meaning of icon:
	Scheduled Operation
	Manual Override
	Comfort Mode
	Boost Mode
	Frost Protection
	Holiday Mode
	Eco Function
	Menu

Picture of icon:	Meaning of icon:
	Heating Schedule
	Energy Use
	User Settings
	Child Lock
	Display Brightness
	Screen Saver
	Currency
	Price per kWh

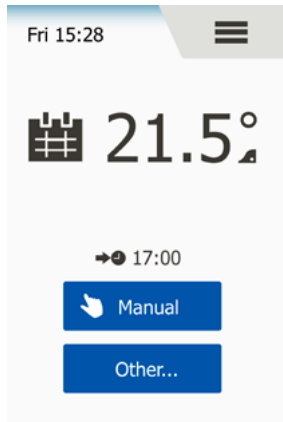
Picture of icon:	Meaning of icon:
	Load
	Date
	Time
	Daylight Saving Time
	Unit
	Language
	Information
	Support

Icons 2/2



Picture of icon:	Meaning of icon:	Picture of icon:	Meaning of icon:	Picture of icon:	Meaning of icon:
	Engineer Settings		Factory Reset		Copy
	Adaptive Function		EN50559		
	Open Window		Error Message		
	Sensor Application		Accept		
	Sensor Type		Cancel		
	Floor Sensor Calibration		Next change in event/ function at the given time		
	Room Sensor Calibration		The time is AM		
	Temperature Scale		The time is PM		

Programmed Heating Schedule



The thermostat allows you to control temperature automatically according to a weekly schedule of your choice. The thermostat comes with a pre-programmed schedule for easy and economic heating control of most homes, see Factory Settings: Preset Schedule.

The schedule can be changed in the Heating Schedule menu.

Operating Choices



The thermostat offers seven different modes of temperature control, either from the “**Other**” menu on the home screen or from the home screen directly:

1. Scheduled Operation - Home Screen
2. Manual
3. Comfort
4. Boost
5. Frost Protection
6. Holiday
7. Eco (this function must be enabled in the “**User Settings**” menu)

You can always quit the current operating mode and return to Scheduled Operation by tapping the “**X**” button.

The function of the buttons and symbols shown on the screen varies according to the chosen operating mode.

Scheduled Operation



The system will operate in Scheduled Operation unless you choose to override the scheduled events.

During Scheduled Operation, the temperature is controlled automatically according to the programmed heating schedule – see “**Heating Schedule**”.

The function of the buttons and symbols shown on the screen varies according to the chosen operating mode.

1. During Scheduled Operation, “**Manual**” and “**Other**” modes are accessible from the home screen.
2. If the Eco function is enabled, “**Eco**” and “**Other**” modes will be accessible from the home screen. “**Manual**” will then be found in the “**Other**” menu.

Scheduled Operation/Home Screen:

3. Day and time info.
4. Tap here to access the Main Menu.
5. Icon indicating the current operating mode (calendar = Scheduled Operation).
6. Current target/setpoint temperature (if shown in red, heating is being provided).
7. Time of next scheduled event change.
8. If shown, the adaptive function is enabled.
9. Tap here to access Manual Override. Alternatively, if Eco Function is enabled, tapping here activates the function.
10. Tap here to access alternative operating modes (Comfort, Boost, Frost Protection, Holiday). If “**Eco**” is enabled, “**Manual**” will be found here as well.



Manual allows you to override Scheduled Operation and maintain a specified temperature around the clock.

1. Tap the **“Manual”** button to access manual override. If Eco is enabled, **“Manual”** will be found in the **“Other”** menu.

You can use “Manual” to override the programmed event schedule.

The thermostat will continue to operate in Manual Override until you return it to Scheduled Operation.

2. Use the **“Up”** or **“Down”** button to set the required temperature. Then simply leave the thermostat as it is.
3. Tap the **“X”** button to quit the current operating mode and return the thermostat to Scheduled Operation.

Manual screen:

4. Indication of Manual Override.
5. Tap here to access the Main Menu.
6. Icon indicating the current operating mode (hand = Manual).
7. Current target/setpoint temperature (if shown in red, heating is being provided).
8. Tap here to increase the target/setpoint temperature.
9. Tap here to decrease the target/setpoint temperature.
10. Tap here to quit Manual Override and return to Scheduled Operation.



You can use Comfort mode on special occasions when you want to override an event during Scheduled Operation, e.g. for a party or when you want to stay up late. You can manually set a comfort temperature, which the thermostat will maintain for a chosen period of time (from 1 to 23 hours) before returning to Scheduled Operation.

1. Tap the **“Other”** button to access the alternative operating modes.
2. Choose **“Comfort”**.
3. Tap **“√”** to confirm that you wish to override the auto heating schedule.
4. Use the **“Up”** or **“Down”** button to set the required temperature. Confirm with **“√”**.
5. Use the **“Up”** or **“Down”** button to set the required duration of Comfort mode. Confirm with **“√”**. The thermostat automatically enters the Comfort mode screen.

You can always quit the current operating mode and return to Scheduled Operation by tapping the **“X”** button.

Comfort mode screen:

6. Indication of Comfort mode.
7. Tap here to access the Main Menu.
8. Icon indicating the current operating mode (feet = Comfort).
9. Current target/setpoint temperature (if shown in red, heating is being provided).
10. The time at which the thermostat will return to Scheduled Operation.
11. Tap here to quit Comfort mode and return to Scheduled Operation.



In Boost mode, the underfloor heating is constantly activated for one hour. After one hour, the thermostat returns to Scheduled Operation.

1. Tap the “**Other**” button to access the alternative operating modes.
2. Choose “**Boost**”.
3. Tap “**√**” to confirm that you wish the thermostat to activate Boost mode. The thermostat automatically enters the Boost screen.

You can always quit the current operating mode and return to Scheduled Operation by tapping the “**X**” button.

Boost screen:

4. Indication of Boost mode.
5. Tap here to access the Main Menu.
6. Icon indicating the current operating mode (rocket = Boost).
7. The time at which the thermostat will return to Scheduled Operation.
8. Tap here to quit Boost mode and return to Scheduled Operation.

Frost Protection



Frost Protection mode is used when heating is not needed but the temperature must be kept above freezing point. Frost Protection remains active until stopped manually.

1. Tap the “**Other**” button to access the alternative operating modes.
2. Choose “**Frost Protection**”.
3. Tap “**√**” to confirm that you wish the thermostat to activate Frost Protection. The thermostat automatically enters the Frost Protection screen.

While in Frost Protection mode an ice crystal and glove are displayed on the screen together with the target/setpoint temperature (5.0°C).

Frost Protection screen:

4. Indication of Frost Protection mode.
5. Tap here to access the Main Menu.
6. Icon indicating the current operating mode (ice crystal and glove = Frost Protection).
7. Fixed target/setpoint temperature (if shown in red, heating is being provided).
8. Tap here to quit Frost Protection mode and return to Scheduled Operation.

Holiday 1/2



Holiday mode allows you to set the heating of your home to a minimum while you are away on holiday, thus saving energy and money.

You must set the date you leave on holiday and the date you return. The thermostat will ensure that your floor is kept above freezing point and that your home is warm at your return. This is accomplished in just a few steps:

1. Tap the **“Other”** button to access the alternative operating modes.
2. Choose **“Holiday”**.
3. Tap the **“OFF/ON”** button to **“ON”** and confirm with the **“√”** button.
4. Set the date on which you are going on holiday. Use the **“Up”** or **“Down”** button.
5. Tap the **“Right”** button to go to the next setting.
6. Set the date on which you are going to return. Use the **“Up”** or **“Down”** button.
7. Confirm with the **“√”** button.
8. A confirmation screen will then be displayed briefly before the thermostat automatically enters the Holiday screen.

Holiday 2/2



During an active holiday period a suitcase is displayed on the screen together with the programmed leaving and return dates.

You can always quit the current operating mode and return to Scheduled Operation by tapping the “X” button.

Holiday screen – shown when holiday mode is active:

9. Indication of Holiday mode.
10. Tap here to access the Main Menu.
11. Icon indicating the current operating mode (suitcase = Holiday).
12. Fixed target/setpoint temperature (if shown in red, heating is being provided).
13. The date on which the thermostat entered Holiday mode and the date on which the thermostat will return to Scheduled Operation.
14. Tap here to quit Holiday mode and return to Scheduled Operation.

Scheduled Operation – Home Screen, with programmed holiday mode:

15. If holiday mode has been programmed but not yet activated, an alternative Scheduled Operation home screen will be displayed, featuring a suitcase.



Eco mode reduces the energy spent on unnecessary heating if you leave the room/ house during a scheduled heating event.

When the Eco mode is enabled, the thermostat enters an energy-saving state, in which the lowest setback temperature in the event schedule is used as the temperature setpoint. At the next scheduled event change, the thermostat returns to normal Scheduled Operation.

To be able to use the Eco mode, it has to be enabled under **User Settings/Eco Function**

With Eco Function enabled in the User Settings:

1. Tap the “**Eco**” button on the Scheduled Operation home screen to access the Eco mode.

The thermostat will then display the Eco mode screen.

Eco mode screen:

2. Indication of Eco mode.
3. Tap here to access the Main Menu.
4. Icon indicating the current operating mode (leaf = Eco).
5. Current target/setpoint temperature (if shown in red, heating is being provided).
6. The time at which the thermostat will return to Scheduled Operation.
7. Tap here to quit Eco mode and return to Scheduled Operation.

Thermostat Setup - Main Menu



The main menu consists of four options which can be used to configure your thermostat.

The main menu is accessed via the “Menu” button on the Scheduled Operation home screen.

1. Tap here to access the Main Menu.

The thermostat will then display the Main Menu screen. Tap the icons to access the menus.

Main Menu screen:

2. Heating Schedule
3. Energy Use
4. User Settings
5. Engineer Settings

Some of the menus have various parameters which can be set.

Heating Schedule 1/2



The heating schedule allows you to control temperature automatically according to a programmed schedule of your choice. The thermostat comes with a preprogrammed event schedule for easy and economic heating control, see Preset Schedule under **Factory Settings**.

1. Tap here to access the Main Menu.
2. Then tap the **“Heating Schedule”** to access the Heating Schedule.

The heating schedule consists of a list of six events. Each event is numbered and has a start time, target temperature/setpoint and activity status. You can easily access and change each event in the schedule.

3. Tap here to access the settings for the specific event.
4. Start time: Tap the **“Up”** or **“Down”** button to change the start time.
5. Target temperature/setpoint: Tap the **“Up”** or **“Down”** button to change the temperature.
6. Event active or not: Tap the text **“The event is active”** or **“The event is inactive”** to make the event active or inactive.
The text shown reflects the current activity status of the event.
Note! Event 1 is always active.
7. Confirm with **“√”** or discard with **“X”** and return to the Heating Schedule.

Heating Schedule 2/2



Once the event settings for this day are as wanted, you can, if you wish, use the same settings for other days. Simply copy the event settings to other days specified by you.

Copy event settings.

8. Tap **“Copy to”** in the top right corner of the screen.
The thermostat will then display a screen where the days of the week are available.
9. Choose the days to which you wish to copy the event settings.
10. Confirm your choice with **“√”** or discard it with **“X”** and return to the Heating Schedule.
11. Tap the **“Arrow Left”** or **“Arrow Right”** to toggle between the days of the week. You can thus easily adjust the other event settings.
12. Once you have finished setting the event schedules, tap the **“Back Arrow”** at the top of the screen to return to the Main Menu.



The **“Energy Use”** menu allows you to read out energy usage data for your underfloor heating system.

1. Tap here to access the Main Menu.
2. Then tap **“Energy Use”** to access the readouts.
3. You can toggle between the readout pages using **“Arrow left”** or **“Arrow right”**.
4. Tap the **“Back Arrow”** at the top of the screen to return to the Main Menu.

You have four different readout pages:

- Last 7 days: A graph of usage during each day of the past seven days will be displayed. The graph shows hours per day.
- Last month: A graph of usage during each day of the past month will be displayed. The graph shows hours per day.
- Last year: A graph of usage during each month of the past year will be displayed. The graph shows hours per month.
- An overview of electricity consumption (kWh) and heating costs for the time periods specified above.

Note: Actual load, currency and price per kWh must be set in the menu under User Settings.

User Settings



The User Settings menu allows you to set various parameters for the thermostat. The menu options are displayed on several pages. Tap the icons to access the various options.

1. Tap here to access the Main Menu.
2. Then tap “**User settings**”.
3. You can toggle between the menu pages using “**Arrow left**” or “**Arrow right**”.
4. Tap the “**Back Arrow**” at the top of the screen to return to the Main Menu.

The User Settings menu contains the following options:

- Child Lock
- Display Brightness
- Screen Saver
- Currency
- Price per kWh
- Load
- Eco Function
- Date
- Time
- Daylight Saving Time
- Unit
- Language
- Information
- Support

Child Lock



The child lock prevents children and others from tampering with the thermostat and changing any of its settings.

1. Tap here to access the Main Menu.
2. Then tap **“User settings”**.
3. Choose **“Child Lock”**.

The thermostat will then display the menu

4. Tap the **“OFF/ON”** button to the setting you prefer.
5. Confirm your choice with **“√”** or discard it with **“X”** and return to **“User settings”**.

The child lock is activated together with the screen saver if the thermostat has not been operated for about 3 minutes.

Before you can operate the thermostat again, you must unlock the child lock.

Unlocking the Child Lock.

If the screen saver is active, tap the screen to waken it. Three circles containing dots will be displayed on the screen.

Draw an **“L”** on the screen in a single stroke without lifting your finger from the screen.

6. Start by touching the dot in the circle in the upper left corner.
7. Then slide your finger downwards to the dot in the circle in the lower left corner.
8. Continue sliding your finger to the dot in the circle in the lower right corner.

If the **“L”** is formed correctly, the home screen will appear.

Note: The child lock will be reactivated together with the screen saver unless it is deactivated in the menu by setting the **“ON/OFF”** button to **“OFF”**.

Display Brightness



This option allows you to change the brightness of the display.

1. Tap here to access the Main Menu.
2. Then tap **“User settings”**.
3. Choose **“Display Brightness”**.
The thermostat will then display the menu
4. Select one of the five levels of brightness using the **“Up”** or **“Down”** button.
5. Confirm your choice with **“√”** or discard it with **“X”** and return to **“User settings”**.

Screen Saver



This option allows you to select the information to be shown in screen saver mode.

1. Tap here to access the Main Menu.
2. Then tap **“User Settings”**.
3. Choose **“Screen Saver”**.

The thermostat will then display the menu.

Choose the information you want to be shown in screen saver mode.

4. Date, Time:
Time shown in large format. Date shown in small format. (See example)
5. Date, Time, Temp:
Temperature (measured) shown in large format. Time and date shown in small format. (See example)
6. Screen Off:
The screen will go black. This setting minimises energy consumption.
7. Confirm your choice with **“√”** or discard it with **“X”** and return to **“User settings”**.



This option allows you to set the currency used by the thermostat.

The “**Energy Use**” function in the Main Menu uses this information to calculate electricity consumption and the cost of heating for a given period of time.

1. Tap here to access the Main Menu.
 2. Then tap “**User settings**”.
 3. Choose “**Currency**”.
- The available currencies will then be displayed on several pages.
4. Find and choose the currency you prefer.
 5. You can toggle between currency pages using “**Arrow left**” or “**Arrow right**”.
 6. Confirm your choice with “**✓**” or discard it with “**X**” and return to “**User Settings**”.

Note! The currencies available may vary depending on the thermostat.

Price per kWh



This option allows you to set the actual price per kWh used by the thermostat.

The “**Energy Use**” function in the Main Menu uses this information to calculate electricity consumption and the cost of heating for a given period of time.

1. Tap here to access the Main Menu.
2. Then tap “**User Settings**”.
3. Choose “**Price per kWh**”.
4. Set the price you pay per kWh using the “**Up**” or “**Down**” button.
5. Confirm your choice with “**√**” or discard it with “**X**” and return to “**User Settings**”.



This option allows you either to enter the load to be used by the thermostat manually or to let the thermostat detect automatically the load of your underfloor heating system.

The “**Energy Use**” function in the Main Menu uses this information to calculate electricity consumption and the cost of heating for a given period of time.

1. Tap here to access the Main Menu.
2. Then tap “**User Settings**”.
3. Choose “**Load**”.

You must now decide whether you want to enter the load yourself or to let the thermostat detect it automatically.

Auto Load Readout “**ON**”:

4. Tap the “**ON/OFF**” button. Set it to “**ON**” if you want to let the thermostat detect automatically the load of your underfloor heating system.
5. Confirm your choice with “**√**” or discard it with “**X**” and return to “**User Settings**”.
6. A warning screen will be displayed, with information on the maximum load according to the supply voltages of the installation.
7. Confirm that you have read the information with “**√**” and return to “**User Settings**”.



With Auto Load Readout “OFF”, you must enter the load yourself. You should ask your heating engineer for this information.

Auto Load Readout “**OFF**”:

8. Tap the “**ON/OFF**” button. Set it to “**OFF**” if you want to set the kW load of your underfloor heating system yourself.
9. Confirm your choice with “**√**”.
10. Set the load of your system using the “**Up**” or “**Down**” button.
11. Confirm your choice with “**√**”.
12. A warning screen will be displayed, with information on the maximum load according to the supply voltages of the installation.
13. Confirm that you have read the information with “**√**” and return to “**User Settings**”.

Eco Function



Eco mode reduces the energy spent on unnecessary heating if you leave the room/house during a scheduled heating event.

In Eco mode, the thermostat enters an energy-saving state in which the lowest setback temperature in the event schedule is used as the temperature setpoint. At the next scheduled event change, the thermostat returns to normal Scheduled Operation.

1. Tap here to access the Main Menu.
2. Then tap **“User Settings”**.
3. Tap **“Arrow right”** to go to the next page.
4. Choose **“Eco Function”**.
5. Tap the **“ON/OFF”** button. Set it to **“ON”** if you want to enable the Eco function.
6. Confirm your choice with **“√”** or discard it with **“X”** and return to **“User Settings”**.

With Eco Function enabled, the Scheduled Operation home screen is altered. The **“Manual”** button is changed to **“Eco”**.

7. Tap the **“Eco”** button to activate Eco mode.

The thermostat will then display the Eco mode screen, see under **Operating Choices/Eco**.



This option allows you to change the date, which is sometimes shown on the home screen and is used for functions such as “Holiday” mode and “Daylight Saving Time”.

1. Tap here to access the Main Menu.
2. Then tap “**User Settings**”.
3. Tap “**Arrow right**” to go to the next page.
4. Choose “**Date**”.

Now you can set the date.

5. Use the “**Up**” or “**Down**” button to set the day, month and year.
6. Choose the date format: DD-MM-YYYY or MM-DD-YYYY.
7. Confirm your choice with “**√**” or discard it with “**X**” and return to “**User Settings**”.



This option allows you to change the time, which is used by the clock to control heating schedule events during Scheduled Operation.

1. Tap here to access the Main Menu.
2. Then tap **“User Settings”**.
3. Tap **“Arrow right”** to go to the next page.
4. Choose **“Time”**.

The thermostat will then display the menu.

Now you can set the time.

5. Use the **“Up”** or **“Down”** button to set the hours and minutes.
6. Choose the time format: 24 hours or 12 hours AM/PM.
7. Confirm your choice with **“√”** or discard it with **“X”** and return to **“User Settings”**.

Daylight Saving Time



When set to ON, the “**Daylight Saving Time**” function will automatically adjust the thermostat clock to the daylight saving time for the “**Region**” chosen in the “**Startup Wizard**”.

1. Tap here to access the Main Menu.
2. Then tap “**User Settings**”.
3. Tap “**Arrow right**” to go to the next page.
4. Choose “**Daylight Saving Time**”.
5. Tap the “**ON/OFF**” button. Set it to “**ON**” if you want to enable Daylight Saving Time.
6. Confirm your choice with “**✓**” or discard it with “**X**” and return to “**User Settings**”.

Note! Some regions do not support the “Daylight Saving Time” function..



The thermostat can show temperature on the display in either Celsius or Fahrenheit. You can set your preferred unit here.

1. Tap here to access the Main Menu.
2. Then tap **“User Settings”**.
3. Tap **“Arrow right”** to go to the next page.
4. Choose **“Unit”**.
5. Set the unit you prefer: Choose Celsius or Fahrenheit.
6. Confirm your choice with **“√”** or discard it with **“X”** and return to **“User Settings”**.



This option allows you to change the language used on the screen.

1. Tap here to access the Main Menu.
2. Then tap **“User Settings”**.
3. Tap **“Arrow right”** to go to the next page.
4. Choose **“Language”**.

The thermostat will then display a menu with all the languages available in the thermostat.

5. Choose the language you prefer.
6. You can toggle between the pages using **“Arrow left”** or **“Arrow right”**.
7. Confirm your choice with **“✓”** or discard it with **“X”** and return to **“User Settings”**.

Note! The languages available may vary depending on the thermostat.



This option provides you with all the information available for your thermostat.

1. Tap here to access the Main Menu.
2. Then tap “**User Settings**”.
3. Tap “**Arrow right**” two times to go to the last page.
4. Choose “**Information**”.

The thermostat will then display the ID of the thermostat (Unit ID) and the temperature of the floor and room sensors.

To obtain detailed information, you can scan the QR code from the thermostat.

5. Tap the “**QR**” button to display the QR code.
6. You can now scan the QR code with a suitable device with Internet access. Software supporting QR code scanning (e.g. an app) is required. Scanning the QR code provides data which is valid at the precise time of scanning.
7. Tap the “**Back Arrow**” at the top of the screen to return to “**User Settings**”.

QR Code is a registered trademark of DENSO WAVE INCORPORATED.



This option provides information on obtaining support for the thermostat. Please consult the “**Troubleshooting**” section of this manual before calling for any support.

1. Tap here to access the Main Menu.
2. Then tap “**User Settings**”.
3. Tap “**Arrow right**” two times to go to the last page.
4. Choose “**Support**”.
5. Tap the “**Back Arrow**” at the top of the screen to return to “**User Settings**”.

Engineer Settings



This menu contains all the parameters the engineer needs to install or service the thermostat.

The “**Engineer Settings**” menu allows you to set various parameters.

1. Tap here to access the Main Menu.
2. Then tap “**Engineer Settings**”.

The thermostat will then display the menu in two pages. Tap the icons to access the various options.

3. You can toggle between the menu pages using “**Arrow left**” or “**Arrow right**”.
4. Tap the “**Back Arrow**” at the top of the screen to return to the Main Menu.

The Engineer Settings menu contains the following options:

- Adaptive Function
- Open Window
- Sensor Application
- Sensor Type
- Floor Sensor Calibration
- Room Sensor Calibration
- Temperature Scale
- Factory Reset
- EN50559

Adaptive Function



With the adaptive function enabled, the thermostat makes sure your room has reached the desired temperature at the start of an event.

The thermostat automatically adapts to the heating schedule even in a warm summer or cold winter. It continues to learn when the heating must be switched on to obtain the required comfort temperature at an event change.

Select “OFF” if you simply want the heating to start at the programmed event, not before.

1. Tap here to access the Main Menu.
2. Then tap “**Engineer Settings**”.
3. Choose “**Adaptive Function**”.
4. Tap the “ON/OFF” button.
Select “ON” if you want the comfort temperature to be reached automatically at the required time.
Select “OFF” if you do not want the thermostat to start the heating system before the event.
5. Confirm your choice with “✓” or discard it with “X” and return to “**Engineer Settings**”.

Open Window



This option allows you to enable the “Open Window” function.

The thermostat can detect an open window in the room by registering a rapid drop in temperature.

With the function enabled, the thermostat shuts off the heating for 30 minutes if an open window is detected in the room.

1. Tap here to access the Main Menu.
2. Then tap “**Engineer Settings**”.
3. Choose “**Open Window**”.
4. Tap the “**ON/OFF**” button. Set it to “**ON**” if you want to enable the Open Window function.
5. Confirm your choice with “**✓**” or discard it with “**X**” and return to “**Engineer Settings**”.
6. If an open window is detected, the “**Open Window**” screen will appear.
7. You can always quit “**Open Window**” mode and return to Scheduled Operation by pressing the “**X**” button.

Sensor Application



This option allows you to choose which sensor is used to control the heating system.

1. Tap here to access the Main Menu.
2. Then tap “**Engineer Settings**”.
3. Choose “**Sensor Application**”.

The thermostat will then display the sensor applications available in the thermostat. Choose the sensor application you prefer:

4. “**Floor**” (factory setting).
With this setting, the floor sensor controls the heating system.
5. “**Room/Floor Limit**” (advanced).
With this setting, the room sensor controls the heating system subject to maximum and minimum limits for floor temperature. The maximum temperature limit protects wooden floors from excessive heat. The minimum temperature limit prevents the floor from becoming uncomfortably cold when heating is not needed, e.g. in a bathroom. Note that this function will increase energy consumption.
Floor Limit temperatures are set in the “**Temperature Scale**” menu.
6. “**Room**”.
With this setting, the room sensor inside the thermostat controls the heating system.
7. Confirm your choice with “**√**” or discard it with “**X**” and return to “**Engineer Settings**”.

Sensor Type



This option allows you to choose the type of floor sensor used with the thermostat. You can therefore choose to use an existing sensor with the thermostat, e.g. in renovation projects.

1. Tap here to access the Main Menu.
2. Then tap “**Engineer Settings**”.
3. Choose “**Sensor Type**”.

The thermostat will then display the sensor types available in the thermostat. Choose the sensor actually used in your installation.

4. You can toggle between the pages using “**Arrow left**” or “**Arrow right**”.
5. “**Factory**” – Used for an OJ sensor supplied with the thermostat.
6. “**Sensor x.x kΩ**” – List of standard sensors.
7. “**Custom**” – Used if your sensor is not shown on the list.
8. Confirm your choice with “**✓**” or discard it with “**X**” and return to “**Engineer Settings**”.
9. If “**Custom**” is chosen, you must provide resistance values for the sensor concerned at four given temperatures – ask the supplier of your sensor for these values.
Go to the next setting with the “**Right**” button or discard your choice with “**X**” and return to “**Engineer Settings**”.
10. Use the “**Up**” or “**Down**” button to set each of the four resistance values.
11. Confirm your settings with the “**Right**” or “**✓**” button or discard them with the “**Left**” button.

Floor Sensor Calibration



This option allows you to calibrate the floor sensor.

You should calibrate the sensor if the temperature reading differs from the actual floor temperature.

Note! Determine whether your floor has a max. temperature limit. Changes in floor sensor characteristics may cause damage to certain floors.

1. Tap here to access the Main Menu.
2. Then tap “**Engineer Settings**”.
3. Choose “**Floor Sensor Calibration**”.

You can now calibrate the sensor with +/- 10°C in steps of 0.5°C.

4. Use the “**Up**” or “**Down**” button to calibrate the floor sensor.
5. Confirm your choice with “**√**” or discard it with “**X**” and return to “**Engineer Settings**”.
6. If calibrated successfully, a confirmation screen will be displayed briefly.

Room Sensor Calibration



This option allows you to calibrate the room sensor.

You should calibrate the sensor if the temperature reading differs from the actual room temperature.

Note! Determine whether your floor has a max. temperature limit. Changes in room sensor characteristics may cause damage to certain floors.

1. Tap here to access the Main Menu.
2. Then tap “**Engineer Settings**”.
3. Choose “**Room Sensor Calibration**”.

You can now calibrate the sensor with +/- 10°C in steps of 0.5°C.

4. Use the “**Up**” or “**Down**” button to calibrate the room sensor.
5. Confirm your choice with “**√**” or discard it with “**X**” and return to “**Engineer Settings**”.
6. If calibrated successfully, a confirmation screen will be displayed briefly.

Temperature Scale 1/2



This option allows you to define your own temperature scale for your thermostat. You can thus control the maximum and minimum temperature within which the thermostat may operate.

You can set the minimum and maximum temperature within which the thermostat will operate – as well as the minimum and maximum limits for floor temperature.

1. Tap here to access the Main Menu.
2. Then tap “**Engineer Settings**”.
3. Tap “**Arrow right**” to go to the next page.
4. Choose “**Temperature Scale**”.

Operating temperatures.

5. Minimum temperature can be set between 5°C and 15°C.
Use the “**Up**” or “**Down**” button to set the minimum temperature.
6. Maximum temperature can be set between 20°C and 40°C.
Use the “**Up**” or “**Down**” button to set the maximum temperature.

Note! If “**Sensor Application**” is set to “**Floor**”, a maximum temperature of 27°C can protect wooden floors from drying out. For precise information, please ask your flooring supplier.

7. Confirm your choice with “**√**”.
8. If “**Room/Floor Limit**” has been selected under “**Sensor Application**”, you can now set the floor limit temperatures. Otherwise, a confirmation screen will be displayed and the thermostat will automatically return to “**Engineer Settings**”.

Temperature Scale 2/2



Floor limit temperatures allow you to set the lowest and highest permissible floor temperature during Floor or Room/Floor Limit temperature control. Floor Limit is not applicable if “Room” is chosen under Sensor Application.

If floor temperature drops below the lowest temperature, the thermostat will start the heating system to maintain the temperature above the set minimum limit.

If floor temperature rises above the highest temperature, the thermostat will stop the heating system to maintain the temperature below the set maximum limit.

Floor limit temperatures.

9. Minimum temperature limit – use this setting to maintain a comfort temperature on tile floors. Can be set between 5°C and 25°C.

Use the “**Up**” or “**Down**” button to set the minimum temperature limit.

10. Maximum temperature limit – use this setting to protect wooden floors from excessive temperatures. Can be set between 10°C and 40°C.

Use the “**Up**” or “**Down**” button to set the maximum temperature limit.

Note: If the maximum limit for floor temperature is set too high, sensitive floor types may be permanently damaged.

11. Confirm your choice with “**√**” or discard it with “**X**” and return to “**Engineer Settings**”.

12. A confirmation screen will be displayed and the thermostat will automatically return to “**Engineer Settings**”.

Factory Reset



This option allows you to restore the thermostat to factory settings.

Note! This action cannot be undone, and all your personal settings will be lost.

1. Tap here to access the Main Menu.
2. Then tap “**Engineer Settings**”.
3. Tap “**Arrow right**” to go to the next page.
4. Choose “**Factory Reset**”.

You can now reset the thermostat.

5. Choose “**Reset Thermostat**” to proceed with restoring the thermostat to factory settings, or tap the “**Back Arrow**” at the top of the screen to return to “**Engineer Settings**” without restoring factory settings.
6. When the thermostat is restored to factory settings, a confirmation screen will be displayed and the “**Startup Wizard**” will appear on the screen.



This thermostat complies with EN 50559 (VDE 0705-559) for electrical floor heating. The regulation applies to electrical floor heating, with a maximum floor weight of 4 kN/m². To ensure that hotspots due to unintentionally covering up the surface are avoided, the heating function can be time-limited as per EN/DIN.

Note that this function is not applicable to other heating applications such as wall and/or ceiling heating

If it can be foreseen in advance that unintentional covering up of a floor might occur, then it is important to assess the correct period of time for which the floor heating must be time-limited.

The heating can be limited using a set number between 0 - 20 minutes per hour.

1. Tap here to access the Main Menu.
2. Then tap "**Engineer Settings**".
3. Tap "**Arrow right**" to go to the next page.
4. Choose "**EN50559**".
5. Use the "**Up Arrow**" or "**Down Arrow**" button to set the number of minutes - the thermostat should not heat per hour.
- 6 Confirm your choice with "**✓**" or discard it with "**X**" and return to "**Engineer Settings**".
The thermostat will automatically return to "**Engineer Settings**".

Factory Settings



Preset temperatures:	
Operating mode	Factory preset temperature
Scheduled Operation	See Preset Schedule*
Manual Override	23°C*
Comfort Mode	23°C*
Boost Mode	Max °C ≤ Maximum Limit
Holiday Mode	5°C
Frost Protection	5°C

*You can change the settings for these temperatures to suit your needs – see Operating Modes in this manual.

Preset Schedule:

Event name	Event start	Target/setpoint temperature dependent on "Sensor Application"	
Work days:		Floor	Room/Floor Limit
Wake up	6:00	25°C	20°C
Leave home	8:00	20°C	15°C
Daytime home*	12:00	25°C	20°C
Daytime leave*	13:00	20°C	15°C
Come home	17:00	25°C	20°C
Go to sleep	23:00	20°C	15°C
Home days:		Floor	Room/Floor Limit
Wake up	8:00	25°C	20°C
Go to sleep	23:00	20°C	15°C

*Only available with 6-event schedule

Troubleshooting 1/2



Error messages:

If a fault or error occurs, the thermostat will display one of the following error messages:

E0: Internal failure. The thermostat is defective. Contact your heating engineer. The thermostat must be replaced.

E1: Internal sensor defective or short-circuited. Contact your heating engineer. The thermostat must be replaced.

E2: External wired floor sensor disconnected, defective or short-circuited. Contact your heating engineer for reconnection or replacement.

E5: Internal overheating. Contact your heating engineer in order to have the installation inspected.

- Three circles containing dots are displayed on the screen; the thermostat cannot be operated.
The thermostat is in “Child Lock” mode. See the section titled “Child Lock” in this manual for instructions on how to unlock it.

Troubleshooting 2/2



Overview of which functions can be used in the various modes.
Not all functions are available in all modes.

Mode vs function	Scheduled Operation	Manual	Boost	Comfort	Frost Protection	Holiday	Eco
Open Window detection	Yes	Yes	Not available	Yes	Not available	Not available	Not available
Floor comfort override sensor application	Yes	Yes	Not available	Yes	Not available	Not available	Not available
Eco Function	Changes the home screen to display the Eco button instead of Manual	Not available	Not available	Not available	Not available	Not available	Not available

Contact Data



Schlüter-Systems KG
Schmölestraße 7
58640 Iserlohn, Germany
www.schlueter-systems.com