Technotherm KS DSM – Control Guide

Contents:
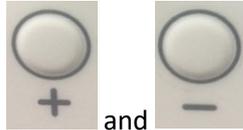
1 – Control via Radiator

1A – Top Tips

- Be aware, all menus time out after ten seconds.

- To lock, or unlock, hold down ⊕ and ⊖ for 3 seconds.

1B – Keypad

	⊕	• Increase
	⊖	• Decrease
	MODE OK	• Toggle Manual / Auto • Bluetooth Connect (with app)
	CONFIG. PROG.	• Set Mode Temperature • Program • Advanced Settings
Manual	Manual	☼ Comfort
AUTO	Automatic	☾ Economy
OFF	Off	✳ Anti-Freeze
Link ♦	Connected to App	⊟ Open Window Detection

![RF thermometer icon]	Set Auto mode temperatures	![bike clock icon]	Adaptive Start	
![heating icon]	Heating			

1C – Choose Mode

- Press ![MODE OK button] to cycle between Manual ![Manual icon] , Auto [AUTO] and Off [OFF] .

- On Manual ![Manual icon] mode, the radiator will heat at a set temperature.

  - Use ![+ button] and ![– button] to set a temperature from 0 – 30 °C

- On Auto [AUTO] mode, the radiator will follow a set schedule.
  - The display will alternate between "PRO" and the set temperature.
  - See "Programming the Radiator" for how to set the radiator schedule.

  - You can use ![+ button] and ![– button] to temporarily set a new temperature while on auto mode. The radiator will heat at your new temperature for 90 minutes before reverting to the schedule.

- On Off [OFF] mode, the radiator will receive commands but won't heat until it is sent a new command – either by the app or by the control panel.
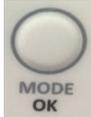
1D – Programming the Radiator

- From Manual ![Manual icon] or Auto [AUTO] mode, hold down Prog. ![CONFIG. PROG. button] for 3 seconds until you see this screen:

  o
- Assign modes to each hour of each day of the week:

o Press Mode [MODE OK] to toggle between the 3 modes: Comfort ☼, Economy ☾ and Anti-Freeze ❊.

o Use [+] and [−] to move through the days, assigning the previous mode as you go. E.g. if you select Comfort ☼ and then press [+] to go through the week, each hour you pass will be set to Comfort ☼ until you change mode again.

o Unfortunately, there is no way to skip through days of the week without overwriting the modes.

o The DSM has a 24/7 timer. When you reach the final hour of the first day, the radiator will automatically move onto the next day. The number at the top of the screen shows which day you are on. 1 = Monday and so on.

o *Note – it can be hard to see the top number if you are looking down on the control panel!*

o Press Config. [CONFIG. PROG.] at any time to leave the programming menu.

- Set temperature of Auto modes:

o Press Config [CONFIG. PROG.]. You should see the [RF] icon.

o Press [MODE OK] to adjust temperatures.

o Comfort ☼, Economy ☾ and Anti-Freeze ❊ modes will be shown in turn. Use [+] and [−] to adjust the temperature and [MODE OK] to switch to the next mode.
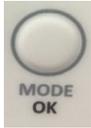
o Press Config. [CONFIG. PROG.] to exit.

1E – Set Time & Date

NOTE – if you have already connected the radiator to the app, you will not be able to change the date or time via the radiator. The radiator will get the time from the app.

- Hold down Config. [CONFIG. PROG.] until you see the programming screen.

- Press Config. [CONFIG. PROG.] once more.

- The day of the week will flash in the top corner. 1 = Monday and so on.

- Use [+] and [−] to adjust the day and press [MODE OK] to confirm.

- Use [+] and [−] to adjust the hours and press [MODE OK] to confirm.

- Use [+] and [−] to adjust the minutes and press [MODE OK] to confirm.

1F – Advanced Settings

- Press Config. [CONFIG. PROG.] .

- Hold down Config. [CONFIG. PROG.] for 5 seconds until you see this screen:

- Use [+] and [−] to scroll through the options below.

- Press [MODE OK] to select a setting.

- Use and to scroll through the options within the setting.
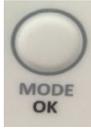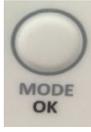
- Press to save setting changes. If you don't press OK, the menu will time out and the settings will return to normal.

Option	Setting	Options	Notes
C1	Temperature Units	• ° F (Fahrenheit) • ° C (Celsius)	
C2	Heating Control Type	• H0.25 • H0.35 • H0.50 • H0.75 • Pi15 • Pi30	This setting controls how the heater, when maintaining a set temperature, responds to information from the thermostat. H stands for Hysteresis. A hysteresis setting means the radiator will respond when the temperature goes above or below the set temperature by a certain threshold. E.g. If you select H0.25, it will respond when the temperature is ±0.25 °C beyond the set temperature. Pi stands for PID Control, which in this context means the radiator checks the temperature and responds based on a time interval. E.g. Pi15 means the radiator will check the temperature and respond every 15 minutes.
C3	Temperature Measurement Compensation	• - 3 to +3 ° C (intervals of 0.1° C)	Adjust the baseline from which the radiator reads the temperature. If it's reading too low, adjust to a minus number. If it's reading too high, adjust to a positive number.
C4	Firmware Version	N/A	Check what firmware version the controller is running.
C5	Open Window Detection	• On • Off	If active, the open window detector will stop heating if there is a fall of 2.4 °C or more within 4 minutes.
C6	Adaptive Start	• On • Off	If active adaptive start function will switch on in advance of its schedule to ensure the room is at temperature when the schedule begins.
C7	Toggle Mode Options – full options or just manual	• Full • Man	If you select "Man", you will not see the "Auto" option when you switch between modes. This is useful if you only want the radiator to work as an on-demand heater.

2 – Control via App

To control your radiators via WiFi you need to purchase a WiFi hub. Commands from your app are received via the router and then the hub sends them to your radiators via a radio frequency.
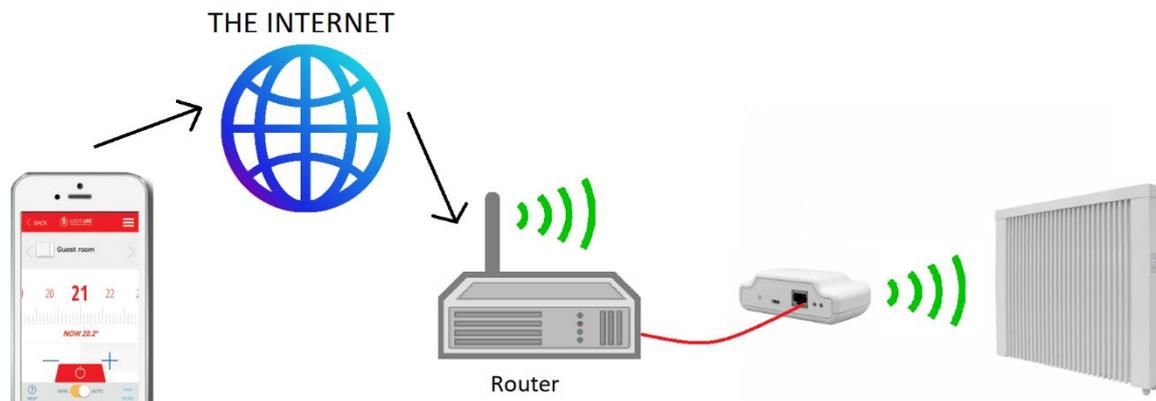

2A – Setting up the WiFi Hub

- Connect the hub to your router with the supplied ethernet cable.
- Plug the hub into the mains with the supplied USB cable and power adaptor.

2B – Setting up the App

- Download the Lucht LHZ Smartcontrol App
- Create an account.
- You will be sent an email to verify your account. Click on the link and return to the app. Press Back to go to the login screen.

> Note – you can also control your DSM radiators by PC. Just go to this link and follow the same steps: https://smartcontrol.lucht-lhz.de/#/signIn
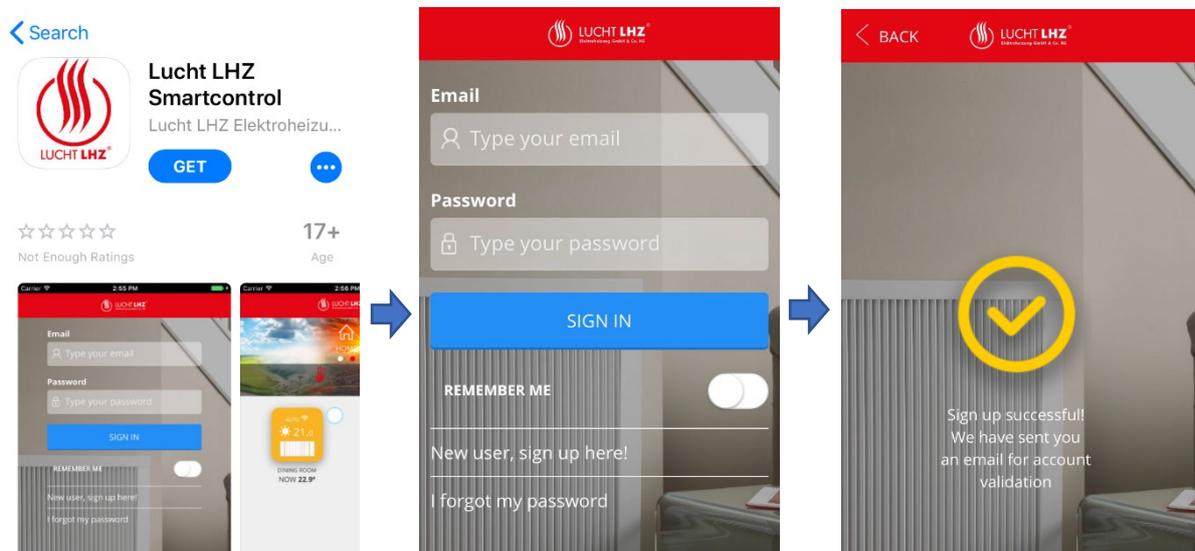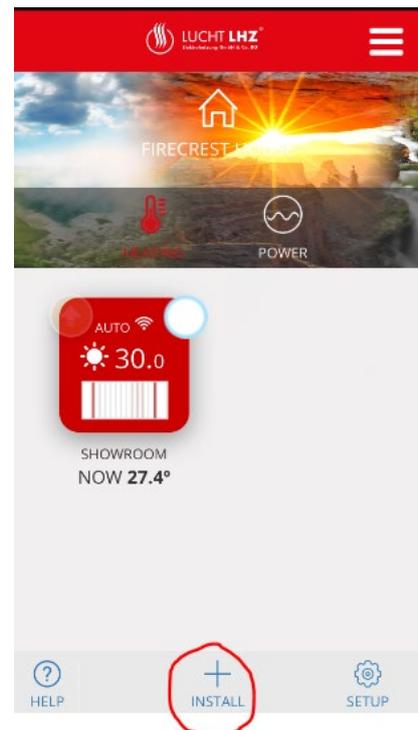
- Login to your account
- Set up your house on the app. Add a name and select the time zone.
- Connect the WiFi hub to the App. The easiest way to do this is by pressing the connection button on the WiFi hub while this screen is showing.
- If this doesn't work, the App will prompt you to add the WiFI hub manually by entering the long code on the back of the WiFI hub.
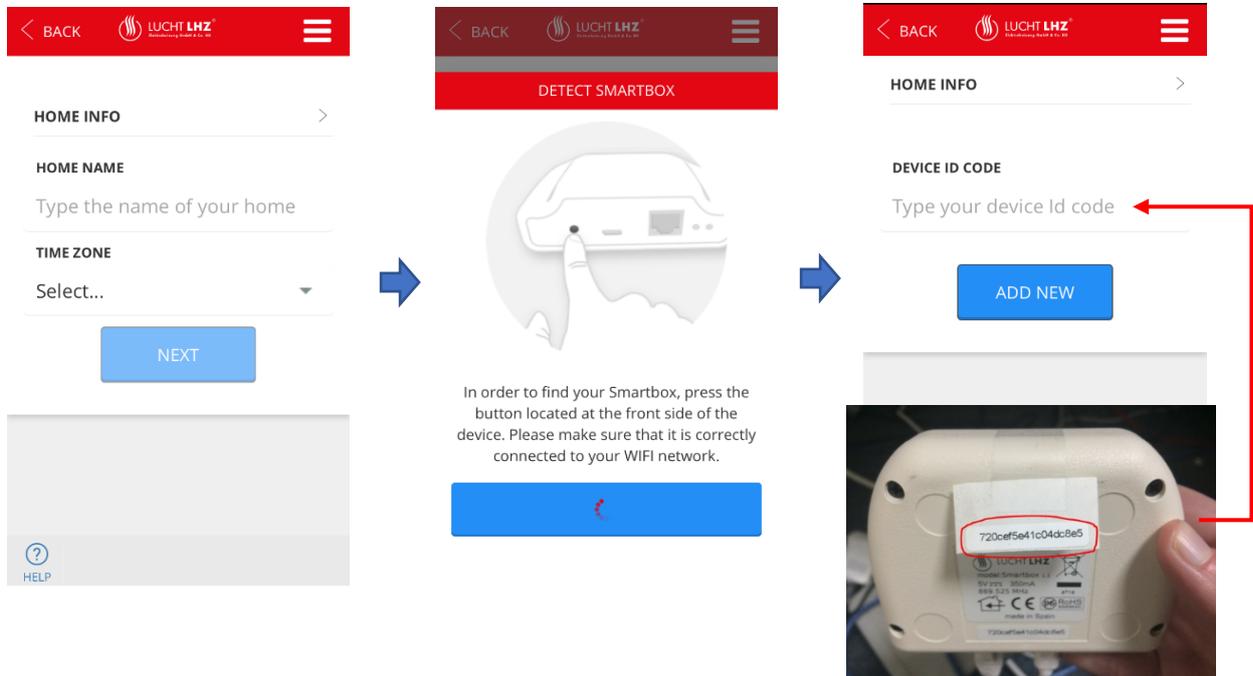
2C – Connecting to your Radiators

- Press install heater Hold down [MODE OK] on radiator for three seconds. You should see the [Link] symbol appear at the top of the screen.

- *NOTE – the symbol may be hard to see if you are looking at the control panel from above!*

- The radiator will appear on the app. You can change its name and other settings via the "More" menu when you click into the radiator.
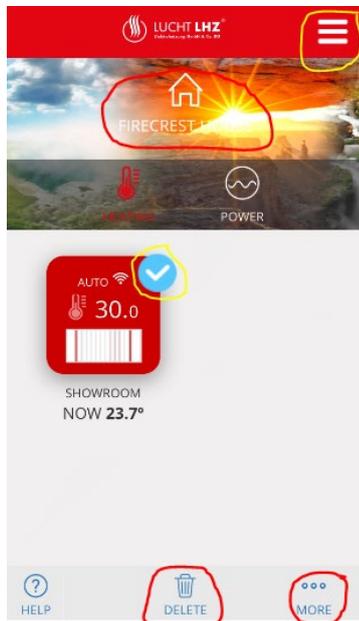
2D – Using the App

Home Screen

This is where you can manage all your radiators and make universal changes to your account.

NOTE – the Lucht LHZ is also designed to work with power meters, so you will see some functions that don't affect your radiators.

- To **delete a radiator** – select the radiator by checking the circle in the corner and pressing delete DELETE .
- To **toggle between At Home and Away mode** – tap the house icon at the top . When the radiator is set to Away mode, your radiators will heat as set but with all temperatures reduced by a set margin. You can adjust this margin in the More MORE -> Setup SETUP menu.
- To **set up geolocation** – press the menu button in the top right corner and press Homes . Press your home and then press Geolocation . From here you can set your location and radius. When geolocation is enabled, your radiators will switch to Away mode when your phone moves outside this radius.
- To **invite new users** – follow steps as above for Geolocation but press Invite Users . Enter the email address of the new user. New users will be able to access home and heating settings but will not be able to invite other users.

Radiator Screen

From the home screen, tap your radiator to enter the radiator control screen. From here you can adjust temperatures, change modes, program and edit the settings of the radiator.
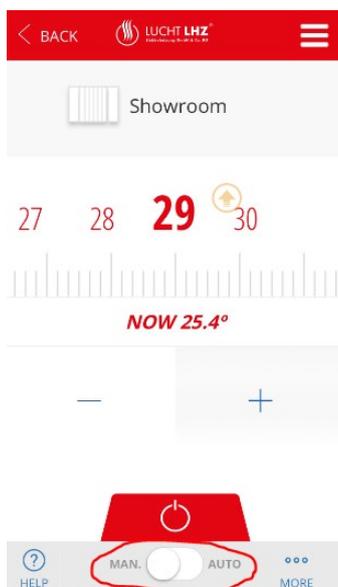
- Use Man / Auto toggle to switch between manual and auto mode
- On Manual mode, you can use the tape measure, or the – and + buttons, to adjust the temperature between 0 – 30 °C.
- You can also do this on Auto mode, where the new set temperature will run for 90 minutes before it reverts to the schedule.
- You can adjust the programming by pressing More MORE and then Schedule SCHEDULE .

Setting a Schedule

- Days are edited individually. Press the day you want to edit and assign modes to each hour.
- Do this by pressing the mode at the top and "painting" it onto the hours you want that mode.
- You can set the temperature of the modes by pressing Set Temp. SET TEMP. .
- You can use the Copy Day COPY DAY function to apply that day's schedule to other days.
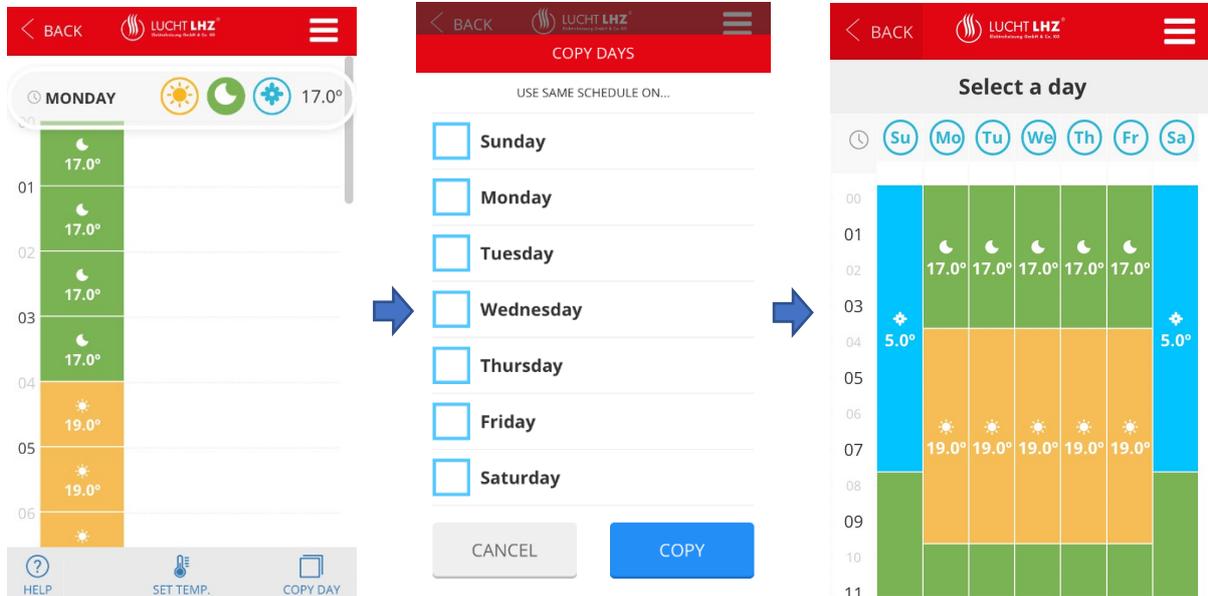
Setup

You can adjust your radiator's settings via the More MORE -> Setup SETUP menu.

- Change name
- Temperature Measurement
  - Celsius (°C) / Fahrenheit (°F)
- Control
  - Hysteresis 0.2 °C, 0.3 °C, 0.5 °C, 0.7 °C
  - PID15 / PID30
- Priority – this setting only comes into effect if you have power meter on the app
  - Low / Medium / High
- Away Offset (°C) – amount set temperatures will drop when you switch to Away mode
  - 0 – 5 °C
- True Radiant – toggle adaptive start feature
  - Yes / No
- Window Mode – toggle open window detection feature
  - Yes / No

> Hysteresis – radiator switches on/off based on variance from set temperature (i.e. 0.2 °C)
>
> PID – radiator switches on/off by checking set temperature after a period of minutes (i.e. 15)

Records

Press More MORE -> Records RECORDS to view statistics of set temperature and power usage. You can switch between Daily, Monthly and Annual view.
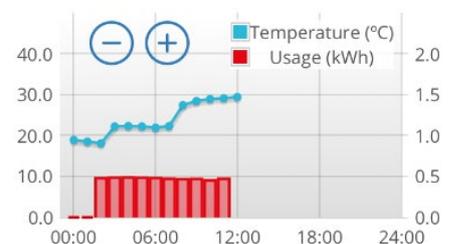
2E – Alexa

Use your voice to control your radiators via Amazon Alexa. Unfortunately, the app is not compatible with Google Home.

- First install the Heating Control skill on the Alexa app
  - https://www.amazon.co.uk/VDI-S-L-Heating-Control/dp/B079JWXZND/ref=sr_1_2?s=digital-skills&ie=UTF8&qid=1548776112&sr=1-2&keywords=heating+control
  - Make sure the skill is enabled on Alexa
- Log in using your Lucht Smartcontrol app username and password.
- Heating Control will display the long code of your WiFI hub. Press Link Device.
- You can then control your radiators using voice commands as follows:

Heating Control
by VDI S.L
Rated: Guidance Suggested
★★★★½ 4
Free to Enable

'Alexa, ask heating control to switch off the living room'

Alexa Voice Commands

All voice controls must follow this formula:

"Start + Command + Device/s"

E.g. "Alexa ask Heating Control to switch on kitchen heater"

Start Command	**Device** Name
"Alexa, ask Heating Control…" or "Alexa, open Heating Control…"	• Name given to radiator on app – i.e. Kitchen. or • "House" or "The House", to apply commands to all heaters. The user can finalise commands using the device type, i.e. heater, but this is not mandatory.
Command List	
… to turn off the <**Device**>.	… to switch off the <**Device**>.
… to turn on the <**Device**>.	… to switch on the <**Device**>.
… to set auto mode at <**Device**>.	… to set auto mode in <**Device**>.
… to set manual mode at <**Device**>.	… to set manual mode in <**Device**>.
… to set <**Temperature**> degrees at <**Device**>.	… to set <**Temperature**> at <**Device**>.
… to set <**Temperature**> degrees in <**Device**>.	… to set <**Temperature**> in <**Device**>.
… to get <**Device**> temperature.	… what's the temperature of <**Device**>?
… what's the temperature in <**Device**>?	… to get the House temperature?
… what's the House temperature?	… what's the temperature at Home?
… what's the temperature in the House?	… what's House temperature?
… to set <**Temperature**> in the House.	… to set <**Temperature**> degrees in the House.
… to set <**Temperature**> at Home.	… to set <**Temperature**> degrees at Home.
… to switch on the House.	… to switch on Home.
… to switch off the House.	… to switch off Home.