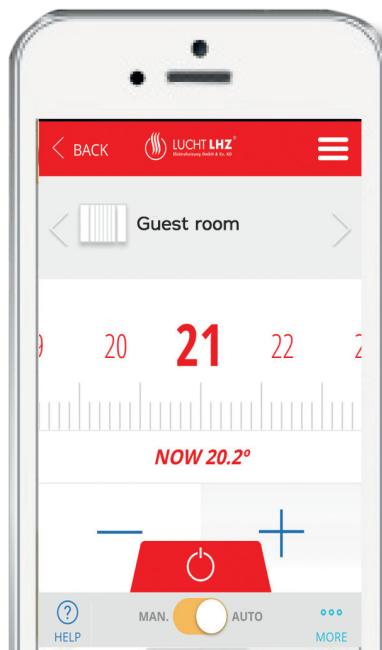


Instruction Manual - LHZ Smart Control Interface



www.smartcontrol.technotherm.com

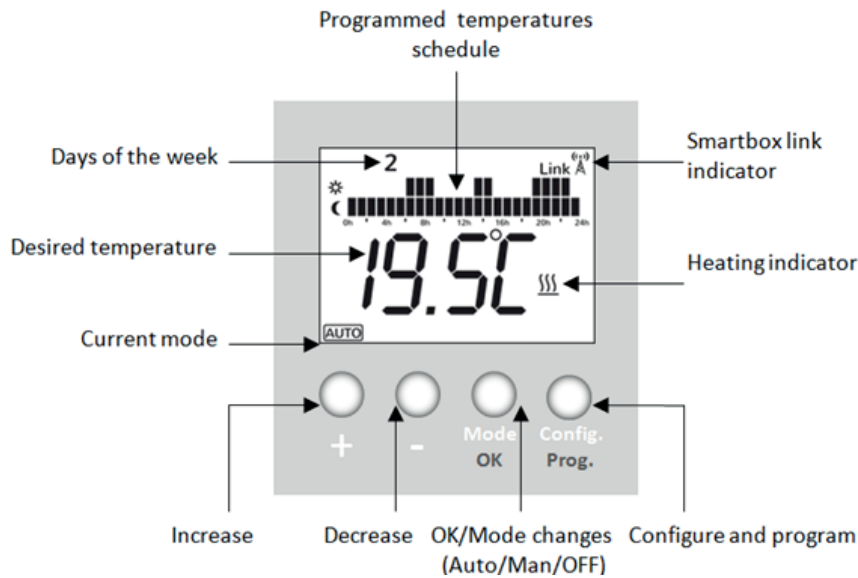


THESE INSTRUCTIONS SHOULD BE READ CAREFULLY
AND RETAINED FOR FUTURE REFERENCE.
BE SURE TO OBSERVE ALL LABELS AND WARNINGS
ON THE APPLIANCE.

Edition:10/16
Id_Nr. 911 360 500

Subject to errors and technical amendments. Dimensions without guarantee!

1 Radiator interface



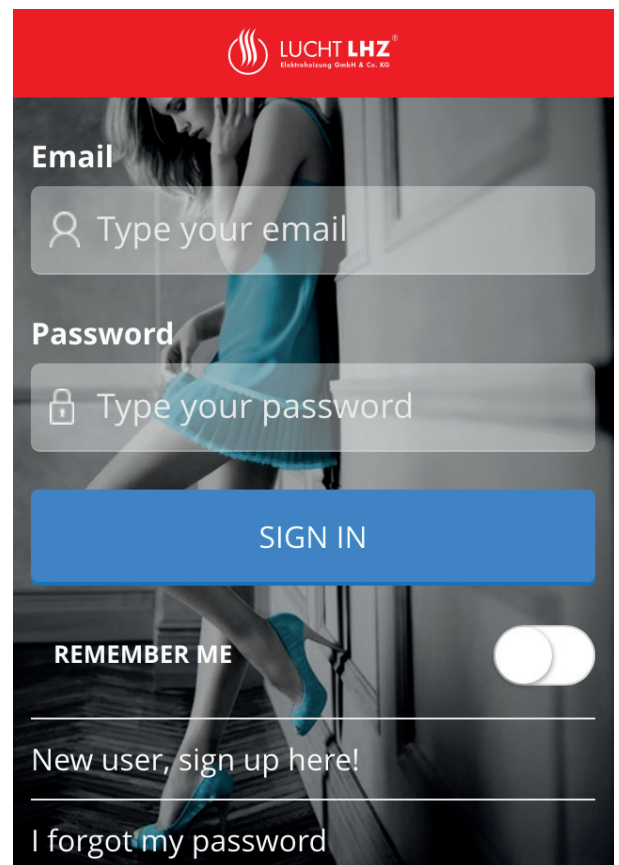
2 Installation

NOTE! It is preferable to register the Smart control box before installing it! If it is registered after installation it may take a few minutes to become accessible via the web. If you do not want to wait, disconnect and reconnect the power supply to the Smart control box.

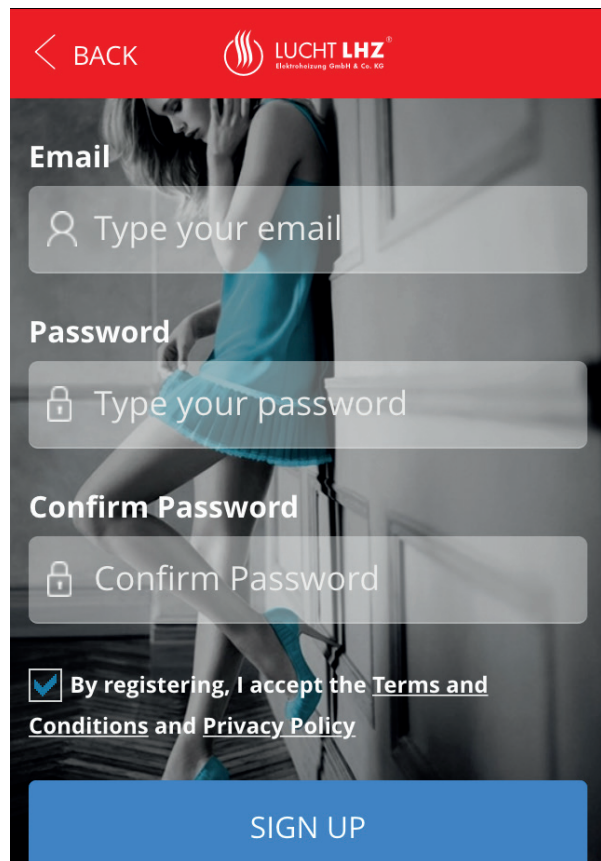
2.1 2 Ways to register the Smart Control

- a) Register the Lucht LHZ Smartcontrol online
<https://smartcontrol.technotherm.com>
- or
- b) register at your LHZ APP

- 1) Click on the „New user - sign here“ Icon and follow the instructions



- 2) Enter a valid email adress for your account
- 3) Enter a Password and confirm it
- 4) Once your data input is correct click „SIGN UP“ and in a few minutes you will recieve a confirmation e-mail. If this does not happen, check your SPAM folder.
- 5) Confirm the link within your e-mail to activate your account.



GB

Start with your Smartbox installation

2.2 Smartbox installation

A Smartbox is needed to control the radiators using web or Smartphone apps. The Smartbox communicates the radiators trough internet using the home router.

The Smartbox communicates by radiofrequency with the radiators and it is connected to the home router using an Ethernet cable (supplied).

- 1) Connect the LHZ Smart control box to your broadband router with the Ethernet cable supplied
- 2) Connect the Micro USB cable to the Smart control box and to the power adapter supplied
- 3) Power the Smart control box





When the LHZ Smart Control App is first connected, the device will try to communicate and link with the server, you will see a sequence of LED's blinking on the box.

GB

The Smartbox LEDs indicates:

- Green OFF, Orange blinking every second: Smartbox on discovery mode, to link new devices
- Orange ON, Green blinking fast. IP not assigned to the Smartbox.
- Orange ON, Green blinking every 5s. Smartbox with IP but does not communicate with the server

Correct connection:

- *Orange ON, alternates with the Green every 5s: Smartbox with IP and connecting correctly with the server*

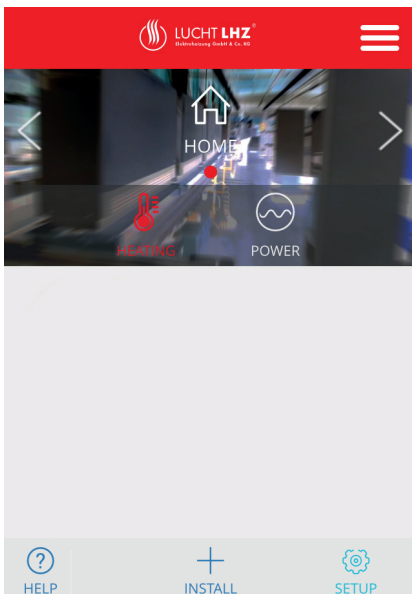
2.3 Once the Smart control box is connected to the Internet now you need to register the Smartbox

There are 2 ways that you can put the LHT Smart control box into register mode.

Option 1: @ <https://smartcontrol.technotherm.com>

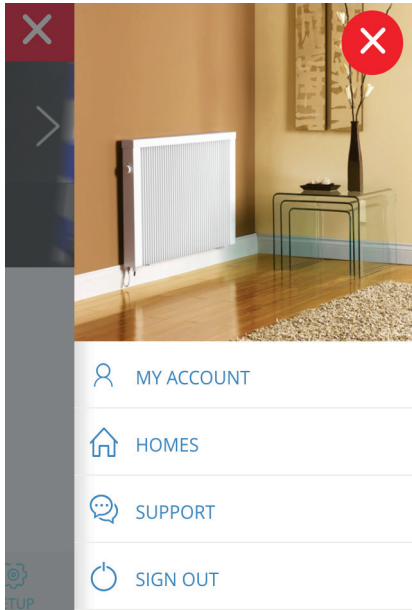
Option 2: @ the LHZ APP

the screens are both the same



1) open the Menue

2) Click „Homes“ to add a new location



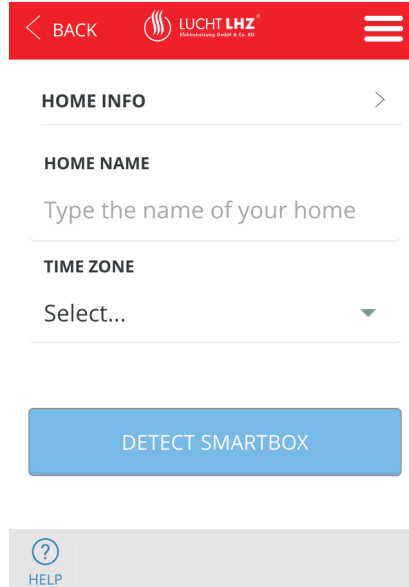
4) Press the button on your Smartbox while detecting. The Smartbox will be linked with your account



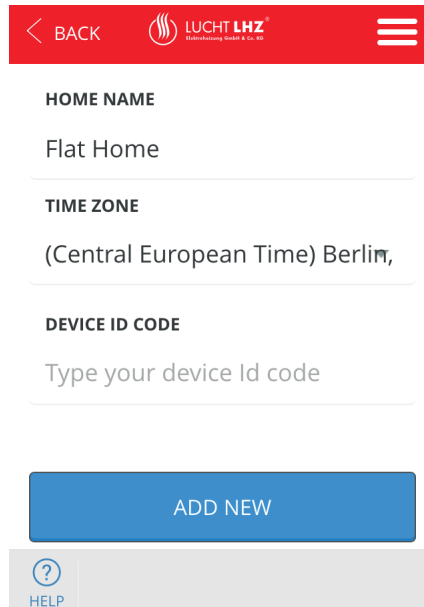
In order to find your Smartbox, press the button located on the top side of the device. Please make sure that it is correctly connected to your WIFI network.



3) Enter a Home Name, select your time zone and press the button „ DETECT SMARTBOX“



5) If the automatically search fails, the next screen shows up. In this case enter the DEVICE ID CODE



Device ID Nummer

2.4 Link radiators to the Smartbox

The radiators must be linked with the Smartbox to be controlled using the apps.

There are 3 ways that you can link the LHT radiators with the Smart Box

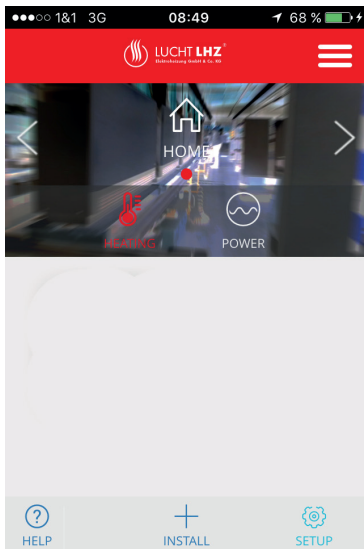
GB

Option 1: @ <https://smartcontrol.technotherm.com>

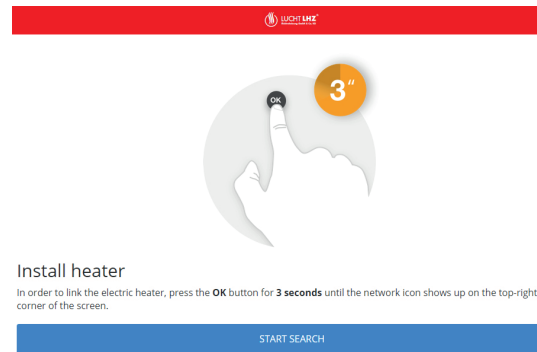
Option 2: @ the LHZ APP

the screens are both the same

1)
Click „Install“ and add a new „Heater“



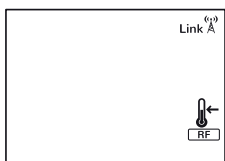
2)
Click „START SEARCH“ and....



3)
Press for 3 sec the „MODE / OK“ button at the Radiator Display

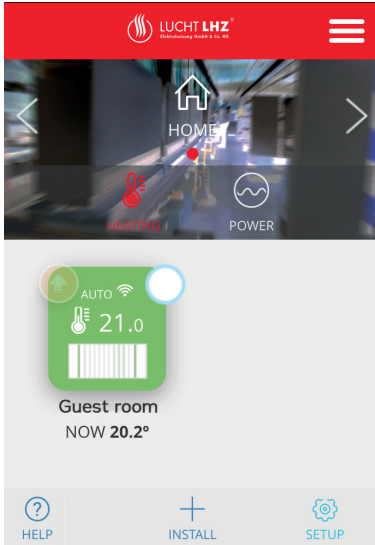


If the radiator was linked by the installer, the next icon will be shown in the radiator LCD:



4)
This icon must be shown at the LCD Display on the radiator.

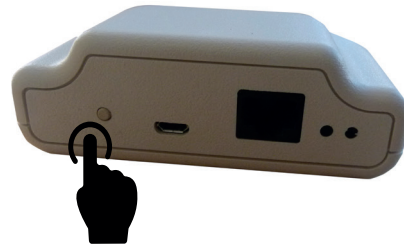
5)
The new Heater is now shown up at your Web and App Display



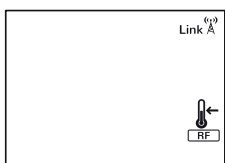
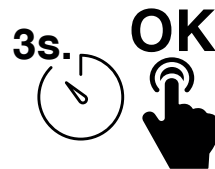
GB

Option 3: without the WEB / App

1) First the Smartbox must set to "discovery" mode, pressing 3s the button of the Smartbox.



2) Press at the radiator the button MODE/OK for 3 sec. to link.



This icon must be shown at the LCD Display on the radiator.

If the radiator was linked by the installer, the next icon will be shown in the radiator LCD:

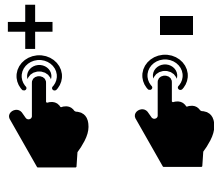
3 Operating instructions

3.1 Modes

The radiator can work at 3 different modes:

- Auto. The setting temperature varies automatically following the programmed Schedule, based on the 3 custom temperatures. The bars in the LCD inform about which of the 3 temperatures is assigned to each hour.
- Manual. Fixed temperature. The set temperature only changes if the user modifies it.
- OFF. The radiator does not heat, but can receive remote orders

Mode



Modify temperature

In "Auto" mode when the temperature is modified temporarily, the change will be effective for the next 1h30 min (*configurable at manufacturer options).

At "Manual" mode the temperature will be fixed.

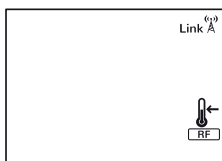
3.2 Adjust programmed temperatures

In "Auto" mode the temperature of each hour will change automatically following the programmed Schedule. The user must assign to each hour one of the next temperatures:

- Comfort (⚙), used normally when the user is at home
- Eco or saving (☾), used when the user is at bed or for brief absence periods
- Freeze or minimum temperature (*) used for absence periods

To define these temperatures:

Config.



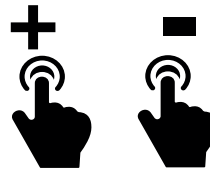
to select

confirm to start defining





increase / decrease temperature



Config.



Exit

3.3 Setting program and time/day

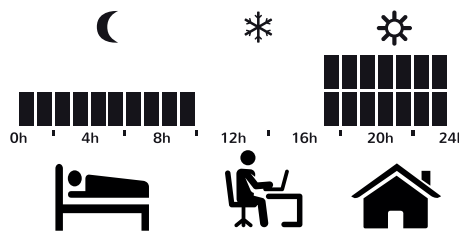
The radiator allows the creation of a weekly programmed schedule assigning to each hour one of the 3 available temperatures. The program for each day can be different.

Use Comfort temperature for the hours that you are at home. (Represented by 2 bars at LCD)

Use Eco-saving temperature for the night hours or short absence periods (Represented by 1 bar at LCD)

Use Freeze-minimum temperature for long absence periods. (Represented by no bar at LCD)

Example:

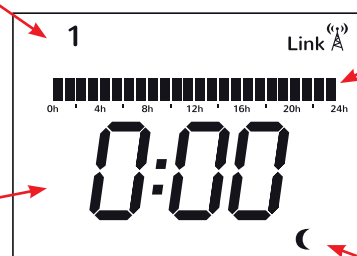


To start programming



Day of the week

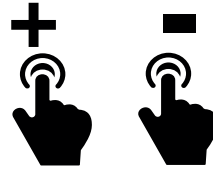
hour



Temperatur/hour bar

Temperature

hour selection



OK



Config.



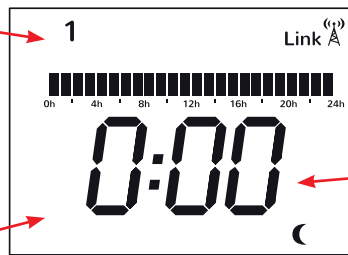
Temperature selection

Exit program and proceed with time / date

GB

If the device is linked to the Smartbox, the time adjustment will be override, and the Smartbox will establish the hour from Internet.

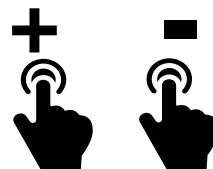
Week day



Minutes

Hour

Modify



Confirm

OK



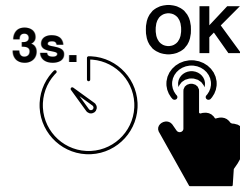
Exit

Config.

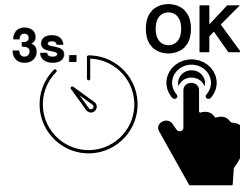


3.4 Keypad locking

To lock, at the LCD the next message will appear



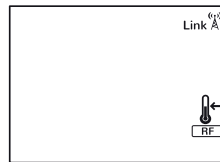
to unlock



GB

4.0 Advanced engineer settings

Config.

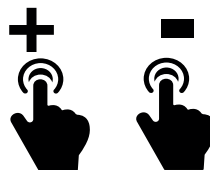


The next configuration will appear:



- C1: Temperature unit adjustment °F/ °C
- C2: Heating control type adjustment (PID –TRIAC radiators-, PID15min or PID30min- Relay radiators-, hysteresis 0.25°C, 0.35°C, 0.5°C or 0.75°C (We recoment 0,25°C!))
- C3: Temperature measurement compensation
- C4: Firmware version
- C5: Open window detection activation (the heating stops for 30 min if there is a fall of 2,4°C or higher within 4 min)

Adjust



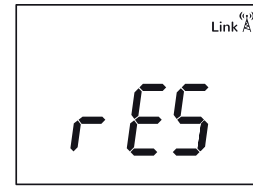
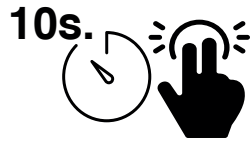
Confirm



5 Reset

5.1 Radiators

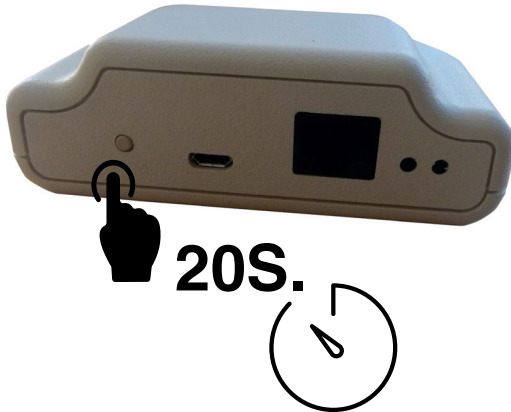
Config. OK



Confirm Reset



5.2 Smartbox



6 Default settings

- Mode: OFF
- T^a comfort: 19°C
- T^a eco: 17°C
- T^a freeze: 5°C
- T^a mode manual: 19°C
- Temperature compensation Offset: 0°C
- No RF link
- Temperature units °C
- Open window detection: OFF
- Control mode: PID -TRIAC-, PID15 -Relay-
- Program: All hours Eco

GB

7 F.A.Q.

1)

The Smartbox does not connect. Check that it is powered and correctly connected by Ethernet cable to the user router through a connection without proxy and with the next output ports open 123 UDP, 5000 TCP and 5001 TCP. The DHCP protocol has to be activated in the router. Make sure to be in the same net.

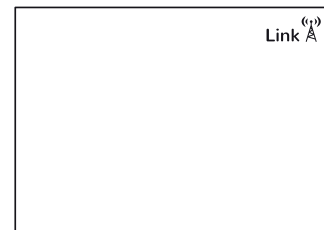
The Smartbox LEDs indicates:

- Green OFF, Orange blinking every second: Smartbox on discovery mode, to link new devices
- Orange ON, Green blinking fast. IP not assigned to the Smartbox.
- Orange ON, Green blinking every 5s. Smartbox with IP but does not communicate with the server
- Orange ON, alternates with the Green every 5s: Smartbox with IP and connecting correctly with the server

2)

The radiators do not connect to the Smartbox:

Be sure that the devices are linked to the Smartbox, check that the Link symbol is at radiator LCD:



If not, proceed with the Link process first as indicated previously at 2.4.

If the distance indoor is greater than 30m and 2-3 walls, start installing first those radiators closer to the Smartbox, as they can retransmit the RF signal to other radiators located outside the RF range of the Smartbox.

If the Link icon of the LCD blinks, the device is linked, but cannot connect to the Smartbox. Check that the Smartbox is correctly powered and that no obstacles are limiting the RF signal. Perhaps a radiator that was retransmitting the signal was removed. Try to locate the devices closer.

If the problem remains, try to reset the devices and start again.

Radiator error messages (for the manufacturer when assembly the radiators, shown in the LCD):

- OC: no connection with temperature probe
- SC: Short-circuit at temperature probe
- Err1: Relay or Triac in short-circuit
- Err2: Overload (power limit exceeded)
- Err3: No load (or very low load, below 100W, check the connection to the resistors)
- Err4: Temperature limit exceeded (>90°C in the electronics)

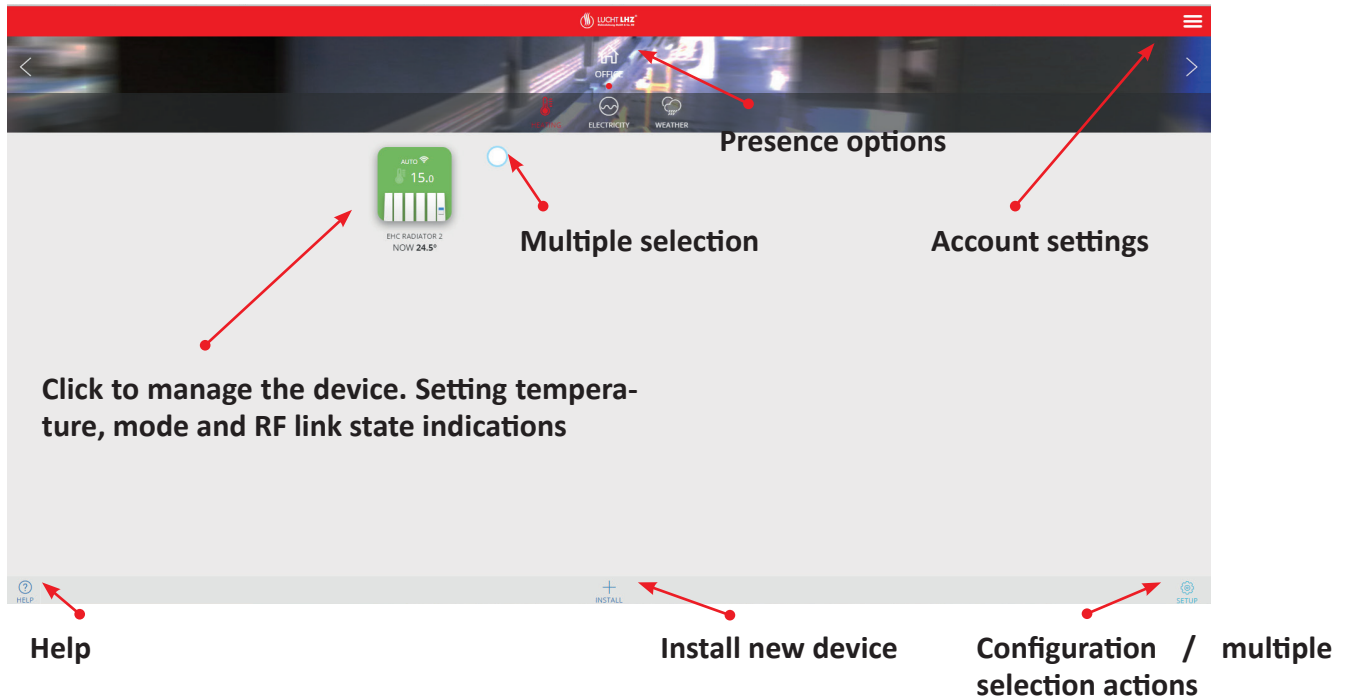
8 Web or App configuration

- the screens are both the same

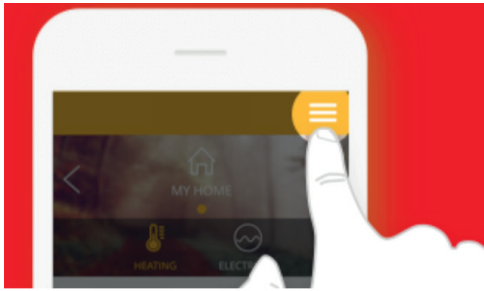
The app allows the user to configure, program, and access to the consumption statistics using a simple and intuitive interface.

GB

Next the main characteristics are presented:



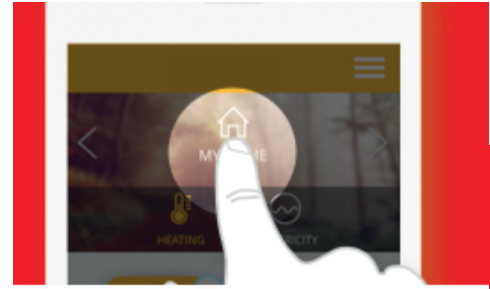
Use the Help button on the main screen to receive a first help:



Main menu

Click icon to Access **account setup options**

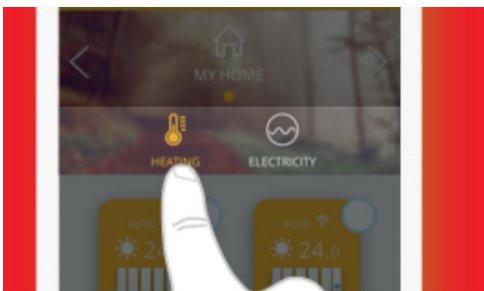
NEXT



Geolocation

Away will reduce by default 2°C

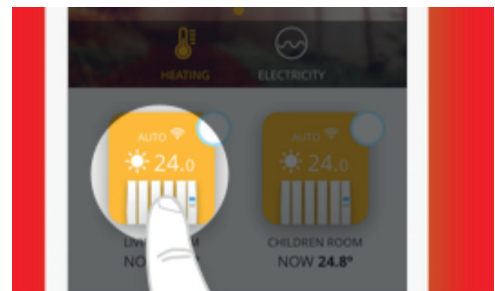
NEXT



Devices

Your devices are divided in sections: **Heaters** or **Power Meter**.

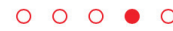
NEXT



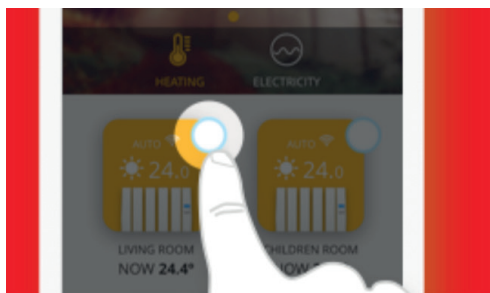
Go to a device

Click on the device to setup and view its records

NEXT



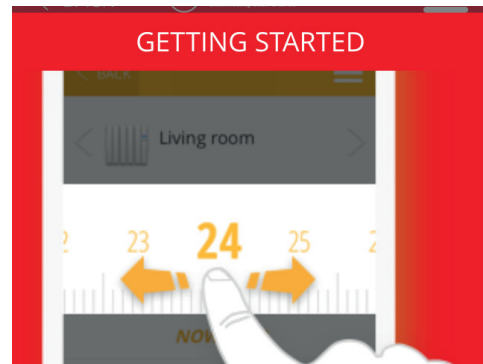
GB



Multi-device actions

Click on devices and select **more** to enter multiple option settings

READY!

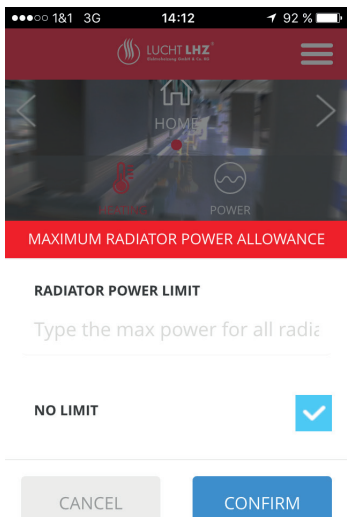


Quick setting

Slide the temperature bar to quickly change the temperature



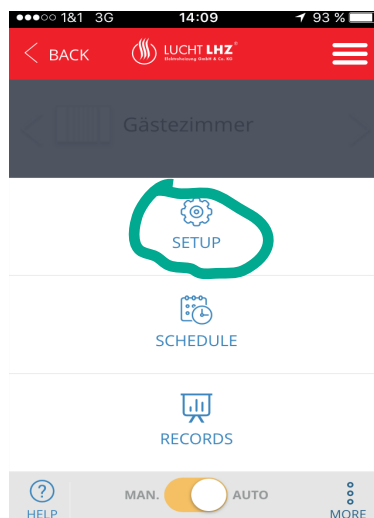
Also in some specific screens, like temperature changing or programming the help button will show specific help:

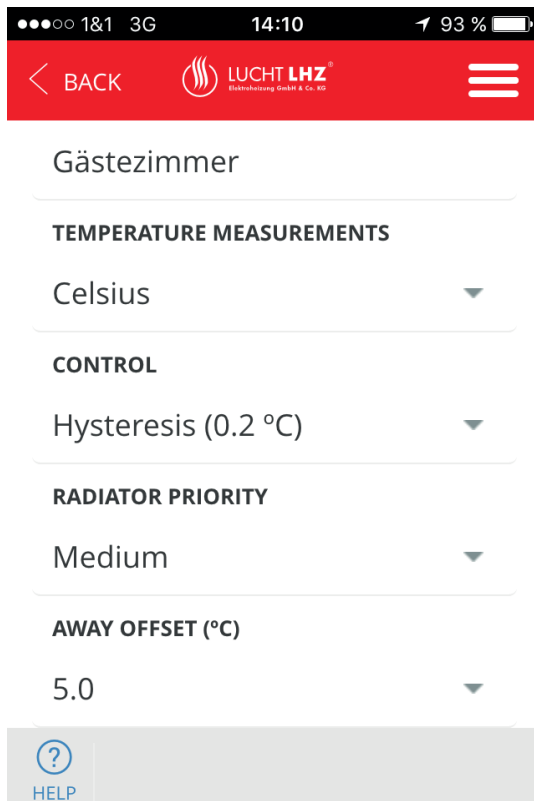


Using the app it is possible to set a limitation to the maximum power consumed by the total of the radiators. Click on configure and set your preferences:

The Smartbox coordinates the radiators to avoid exceed the limit. The Smartbox will select the radiator to be switch off using the priority that can be established on the radiator settings:

The Smartbox will switch off the radiators with lower priority but also considering the difference between the setting temperatures and measured temperatures to avoid cold zones at the house.





To identify one radiator, you can select it touching the circle close to its icon, on the main screen, the radiator LCD backlight will blink, this is useful to assign the different names (kitchen, living-room..).

At this screen it is also possible to change the name of the radiator, and set temperature units or heating control.

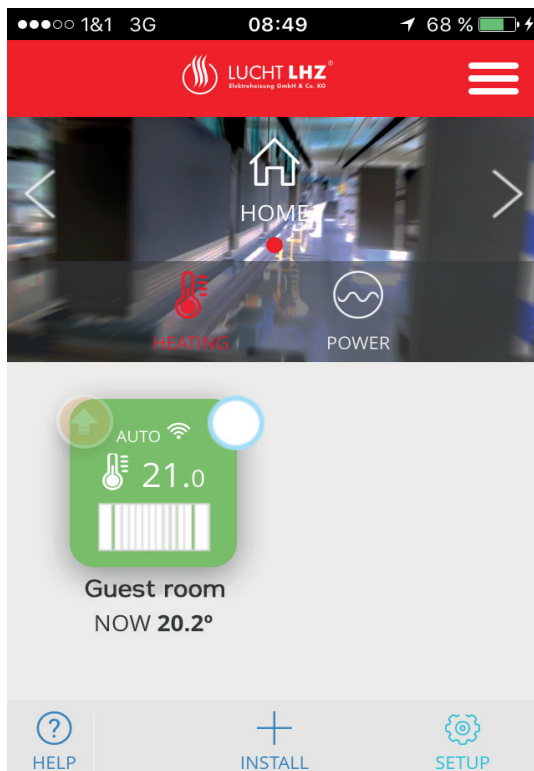
The „Away OFFSET is an important function.

The value of 5 ° C entered here will affect, that this heater will go down 5°C from the actual temperature if you activate the „Away“ function.

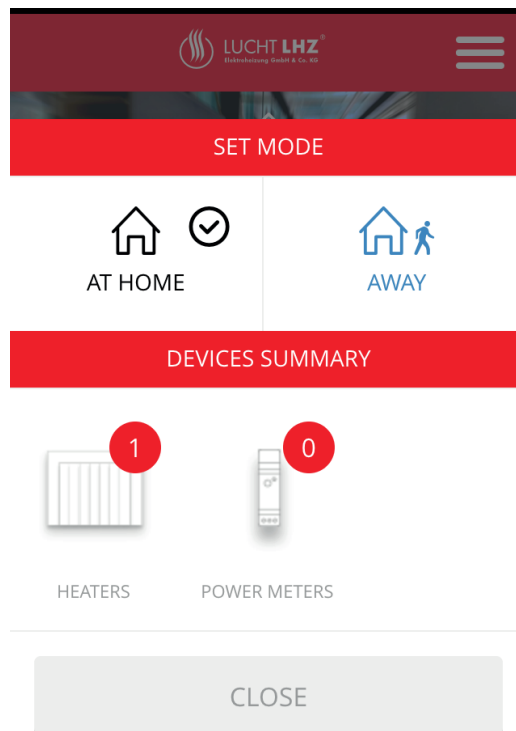
GB

To activate the „Away“ function:

1) Click on „HOME“



2) Click at „AWAY“



9 Specifications

9.1 Radiators

- LCD STN with backlight
- 4 buttons
- RF 868Mhz
- 1PCB for control, 1PCB for Power
- 3 temperatures
- Comfort
- Economic
- Anti-freeze
- Measured temperature resolution: 0.1°C
- Setting temperature resolution: 0.5°C
- Measured temperature range: 0-45°C
- Setting temperature range: 5-35°C
- Schedule programming resolution 1h
- PCB operating temperature <80°C
- External NTC probe
- Electric self consumption metering <3%error
- Transformerless power stage
- Max power: 3500W (16A) for Relay and 2000W for TRIAC

9.2 Smart Box

- Voltage: External Power Supply, 5V 500mA
- Consumption 300mA
- Connector RJ45 for Ethernet connections
- LED indicators of conditions
- 868Mhz RF, integrated PCB antenna
- Micro USB Adaptor included
- Ethernet 0,5m cable included



Support

+49 (0) 3722 63370