ENGO CONTROLS E20i-TXW Smart Thermostat Wifi User Guide

Wireless, Internet Thermostat, Wi-Fi

E20i-TXW
E20i-TXB
E20i-RX
Quick Guide

Contents

Introduction:

A wireless set for controlling standard heating devices (e.g. gas boilers). It is characterized by: simplicity of construction, intuitive operation using the keys and a large and legible display. The built-in Wi-Fi module enables easy and quick configuration of the device in the ENGO Smart mobile application. The controller can be shared with many users, has a scheduling function and a PIN lock. Factory paired and ready to work.

Product Features:

	Wi-Fi 2.4 GHz communication standard
	Wireless communication in the 868 Mhz standard
	Compatibility with the ENGO Smart application
	Possibility to set the minimum and maximum setpoint temperature range
	HEATING/COOLING function

Technical specifications

Thermostat power supply	2xAA batteries
Receiver power supply	230V AC 50 Hz
Max load of the receiver	16(5)A
Receiver output signal	COM / NO (voltage free)
Temperature control range	5,0°C – 35,0°C
Control algorithm	TPI lub Hysteresis (±0,2°C to ±2°C)
Control algorithm	Wireless, 868 Mhz + Wi-Fi 2,4 GHz
Dimensions [mm]	Transmitter: 80 x 80 x 22 Receiver: 96 x 96 x 27

Product Compliance

This product complies with the following EU Directives: 2014/53/EU, 2016/65/EU 868.0 MHz – 868.6 MHz; <13dBm Wi-Fi 2,4 GHz

Please note!
This document is a brief manual of the installation and operation of the product and highlights its most important features and functions.

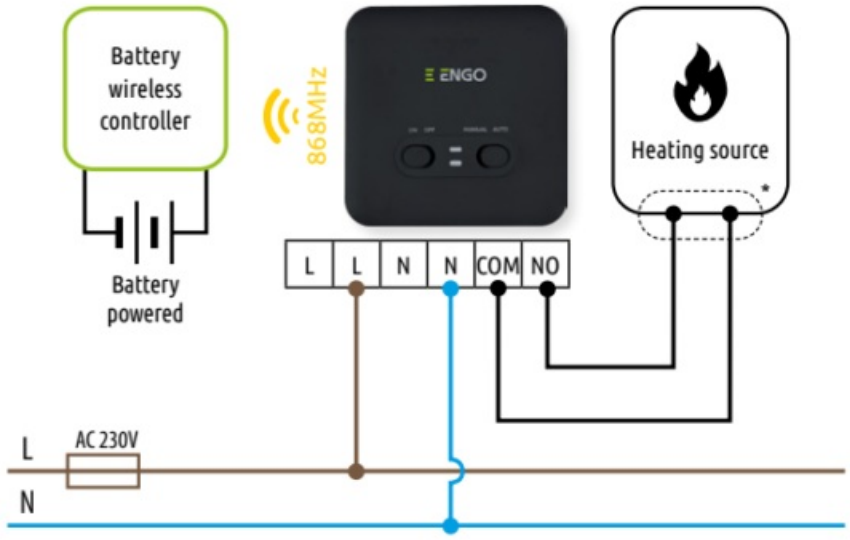
SAFETY INFORMATION:
Use in accordance with national and EU regulations. Use the device only as intended, keeping it in a dry condition. The product is for indoor use only. Please read the entire manual, before installation or use.

INSTALLATION:
Installation must be performed by a qualified person with appropriate electrical qualifications, in accordance with the standards and regulations in force in a given country and in the EU. The manufacturer is not responsible for non-compliance with the instructions.

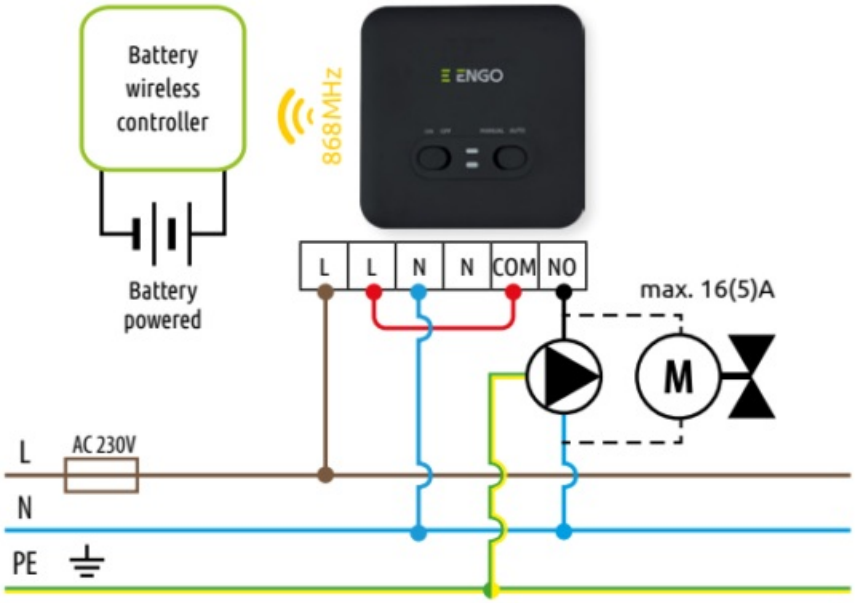
WARNING:
For the entire installation, there may be additional protection requirements, which the installer is responsible for.

Wiring Diagrams

a) Connection diagram of the receiver to the heat source



b) Connection diagram of the receiver to the pump / actuator



c) Connection diagram of receiver to control box

Wall mounting of the regulator

Attach the mounting plate to wall.

Insert the batteries.

Attach the thermostat to the plate.

Receiver

Receiver's switches description:
LEFT SWITCH

1. Receiver ON
2. Receiver OFF

RIGHT SWITCH

3. MANUAL – Receiver works in manual mode (according to the left switch)
4. AUTO – Receiver works in AUTO mode (according to the thermostat's command)

1
- red (upper one),
- green (upper one),
- blue (upper one),
- pink (upper one)

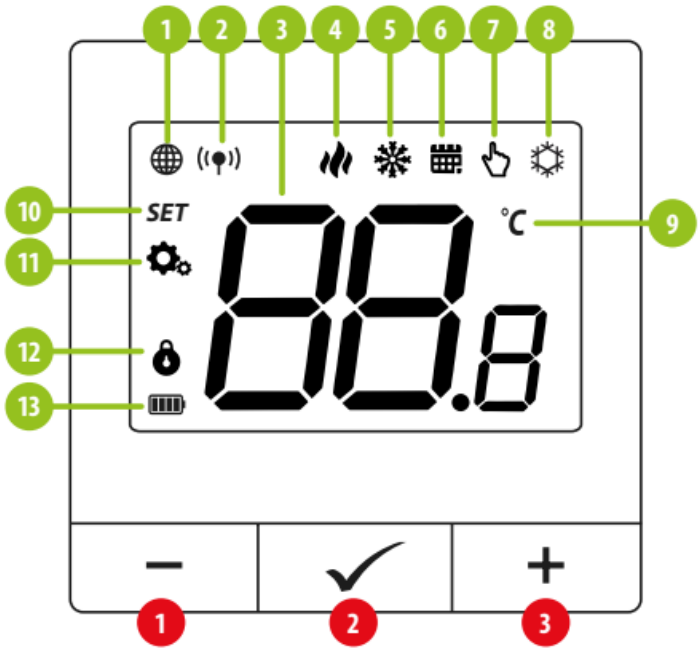
2
- orange (lower one).

LED indications in the receiver
The status of the receiver is indicated by two LEDs. These are LEDs with the following colors:

A detailed explanation of the meaning of the LEDs can be found in the table below:

	DESCRIPTION
The red LED flashes	The red LED diode flashes – Receiver and thermostat are prepared for installati on in the app. LED always flashes red: – immediately after connecting the receiver to the power supply, Ef the thermost at is not added to the app – after running the parameter”APP”-> YES (installer p arameters) – after removing thermostat from the app (device automatically entered pairing mode)
The red LED steady	The red LED diode is steady – E20i VVi-Fi has not been installed in the app and it is working in Offline mode. It means also app pairing mode timed out (pairing with app must bedone within 10 minutesafter enabling pairing mode).
The green LED is solid	The receiver is connected to a router but there is no connection to Internet (rout er is offline)
The green LED flashes	The receiver lost connection with a router (router is off)
The blue LED is solid	The receiver is connected to a router that has Internet access (router is online)
The blue LED flashes	The receiver was paired but lost communication with the thermostat due to out of range or low battery in the thermostat. When receiver lost communication wit h thermostat it starts flashing after 15 minutes.
The or LED is solid	In automatic mode, the receiver received a heating / cooling signal from the ther mostat or the receiver was started in manual mode (left switch ON, right switch MANUAL)
The orange LED flashes	The receiver is in the pairing mode and is looking fora signal from the thermosta t (then you must activate the “SYNC” parameter in the thermostat).
The °ran(LED is off	The receiver does not send a heating / cooling signal.
The pink LED is on	Update process started. To increase the chance of success of the update – imm ediately after the pink diode appears, click any thermostat’s button to turn on ba cklight

LCD icon description



1. Button –
2. Button ✓
3. Button +

1. Internet connection
2. Send a signal (pairing)
3. Current/Setpoint temperature
4. Heating indicator
5. Cooling indicator
6. Schedule mode icon
7. Temporary override mode
8. FROST (anti-freeze mode)
9. Temperature unit
10. Settings icon / temperature settings
11. Settings icon
12. Button lock
13. Battery indicator

Button functions

+	Change the parameter value up
—	Change the parameter value down
✓	Manual/Schedule mode – short button press (Online mode)
	Enther the installer parameters – hold 3 seconds
	Turn OFF/ON thermostat – hold 5 seconds (standby)
+ &—	Enter the pairing mode – hold until the PA message appears, then release the keys
	Pairing the transmitter with the receiver – hold until the SY message, then release the keys
	Factory reset – hold until the FA message appears, then release the keys
+ & ✓	Lock/Unlock thermostat keys – hold 3 seconds
— & V	Heating/Cooling mode change – hold 3seconds

Video tutorials

YouTube

https://www.youtube.com/@engocontrols5880

Installation of thermostat in the app
Make sure your router is within range of your smartphone.
Make sure you are connected to the Internet. This will reduce the pairing time of the device. Use only Wi-Fi 2,4GHz network

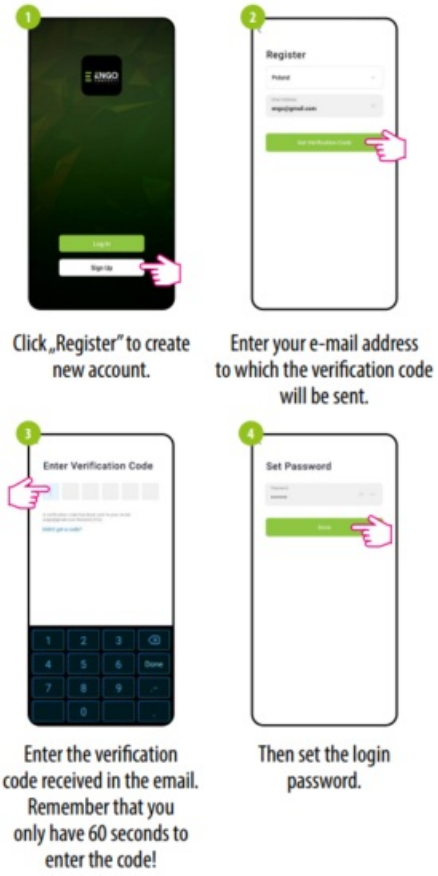
STEP 1 – DOWNLOAD ENGO SMART APP
Download the ENGO Smart app from Google Play or Apple App Store and install it on your smartphone.

Powered By

GET IT ON Google Play

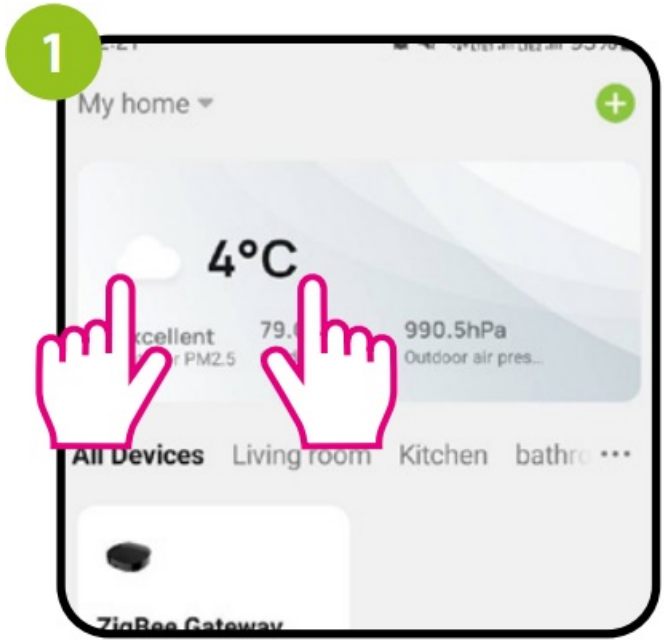
Available on the App Store

STEP 2 – REGISTER THE NEW ACCOUNT
To register a new account, please follow the steps below:

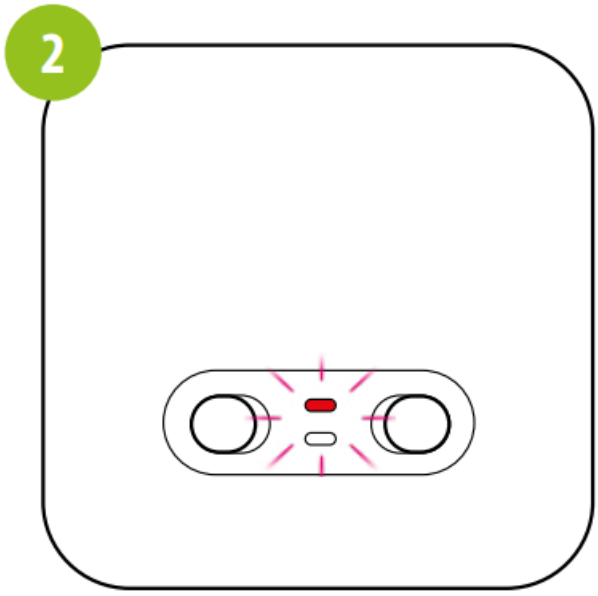


STEP 3 – CONNECT THE THERMOSTAT TO WI-FI
After installing the app and creating an account:

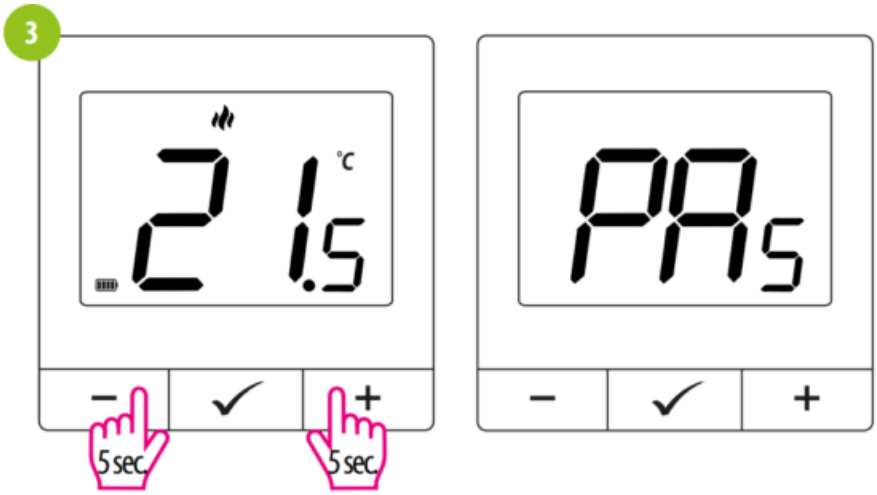
1. On your mobile device, make sure the ENGO Smart has access to permissions (Location, Bluetooth, Nearby devices).
   Then turn on Bluetooth and Location. Connect to 2.4GHz WFi network to which you want to assign the device.



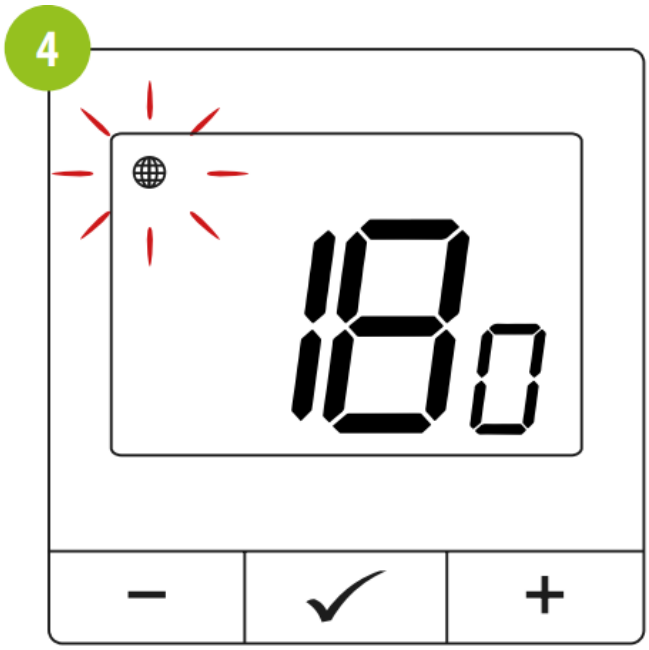
2. Connect the receiver to the power supply.
   When first powered up, the red led will start flashing, which means that devices are ready to be added to the application. Go to step 5 (adding devices in the app). If the red LED on the receiver is not flashing, proceed with the next steps.



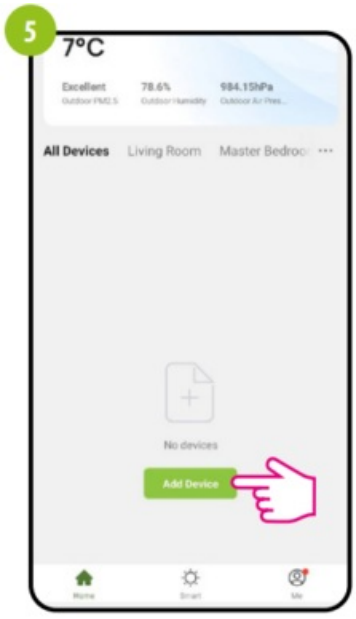
3. Press and hold the – & + buttons for approx. 5 seconds until the display shows „PA”. Then release the keys. The pairing mode will start.

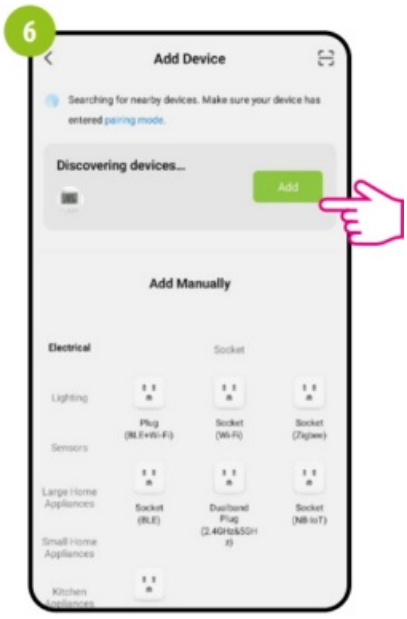


4. The Thermostat counts the time back (180s).

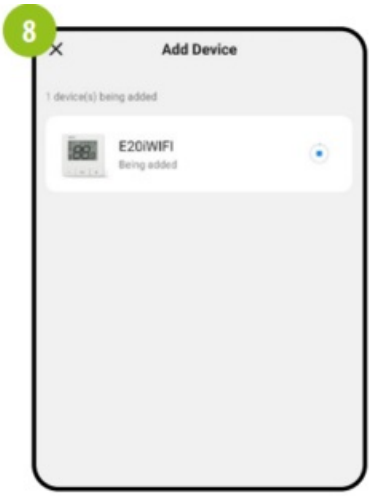


5. In the app, select: „Add Device”.

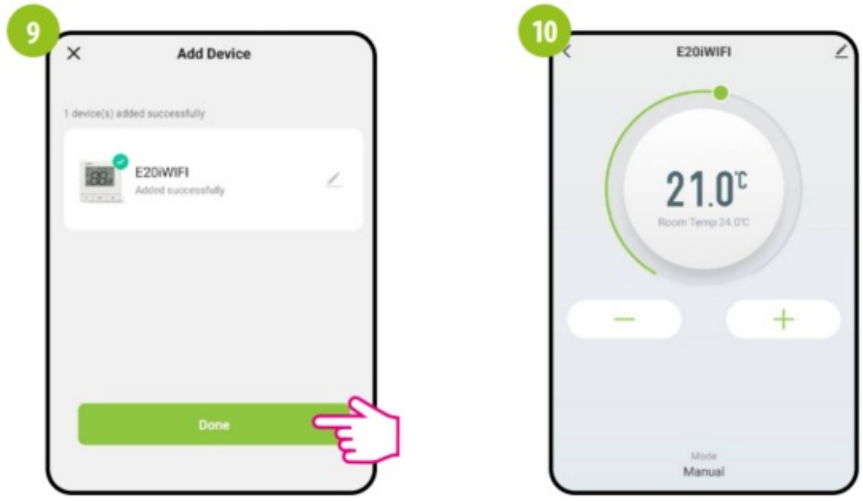




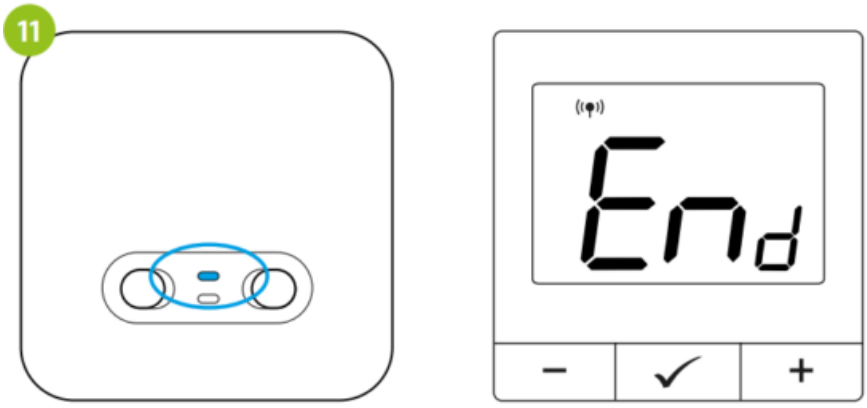
6. After finding the thermostat, go „Add”.
7. Select the Wi-Fi network in which the thermostat will operate and enter the password of this network.



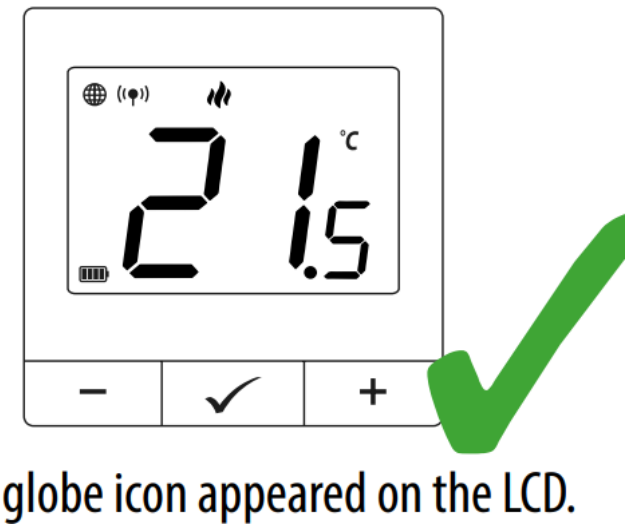
8. Wait for the app to configure the thermostat with the selected Wi-Fi network.
9. Go „DONE”.



10. The thermostat has been installed and displays the main interface.



11. When the blue LED on the receiver will light up, it means the device has been correctly added to the application and is now connected to the Internet.

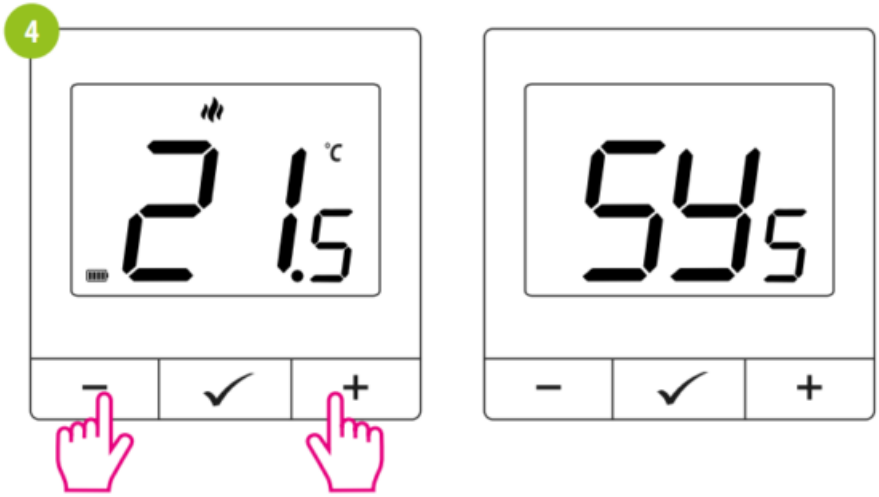


A globe icon appeared on the LCD.

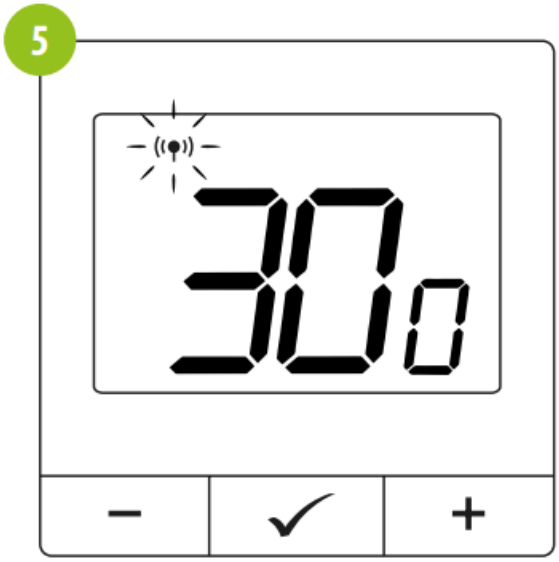
Pairing process with the receiver

PLEASE NOTE!
THERMOSTAT IS ALREADY PAIRED WITH THE RECEIVER!

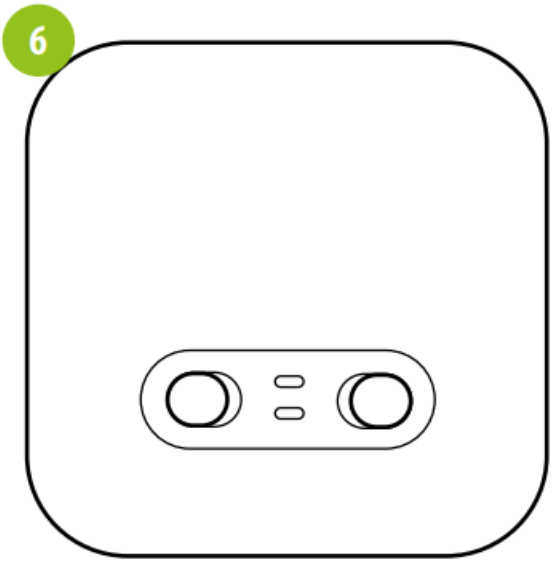
If you want to re-pair the receiver and thermostat with each other and then add it to the application, make sure that the receiver is disconnected from the power supply, and the switches on it are in the ON and AUTO positions. Then connect the receiver to the power supply and wait a few seconds.
Next, move the left switch to the OFF position and back to the ON position with a quick motion. The orange LED will start blinking, which will confirm that the receiver has entered the pairing mode.



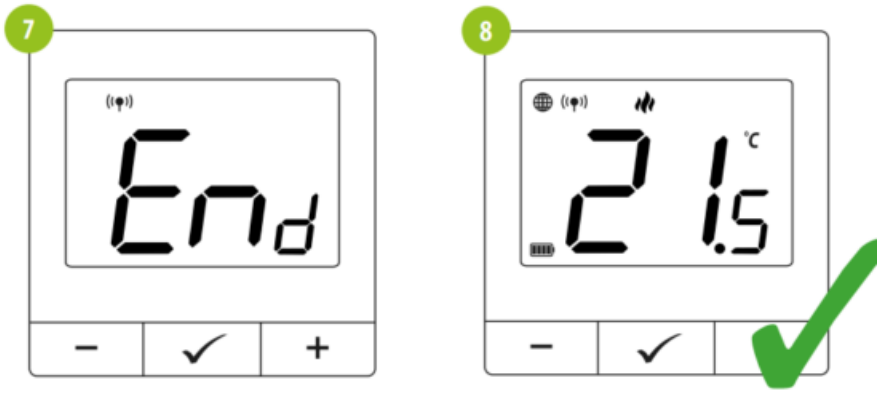
Press and hold the – & + buttons for approx. 5 seconds until the display shows „SY”. Then release the keys.



The thermostat started to send a signal to ((•)) find the receiver and started the countdown with the number 300 (sec). The pairing process may take up to 300 seconds.



When the orange LED stops blinking, the devices have been paired on a new frequency.



After successfull pairing operation ” End” message will be displayed.

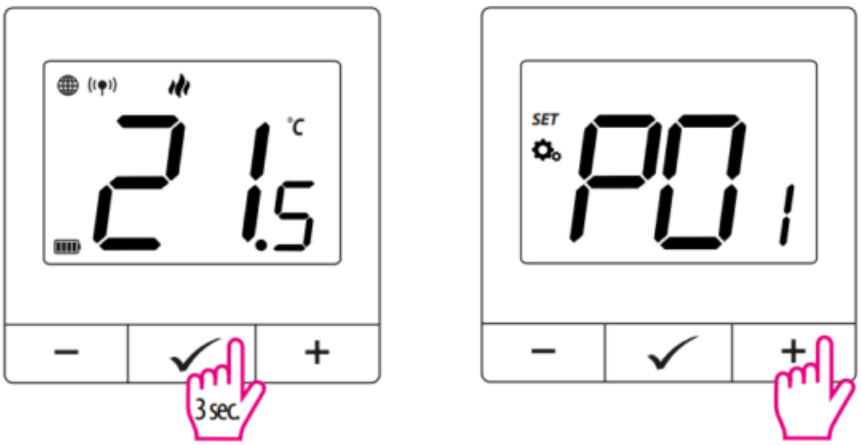
Thermostat displays the main screen, icon ”((•))” .

PLEASE NOTE!

If the devices remain unpaired after 10 minutes (e.g. no antenna icon on the controller, the receiver does not respond to the heating signal from the controller), the pairing process must be repeated, taking into account the distances between the devices, obstacles and interference.

Installer settings

To enter installer parameters press ✓ and hold button for 3 seconds.



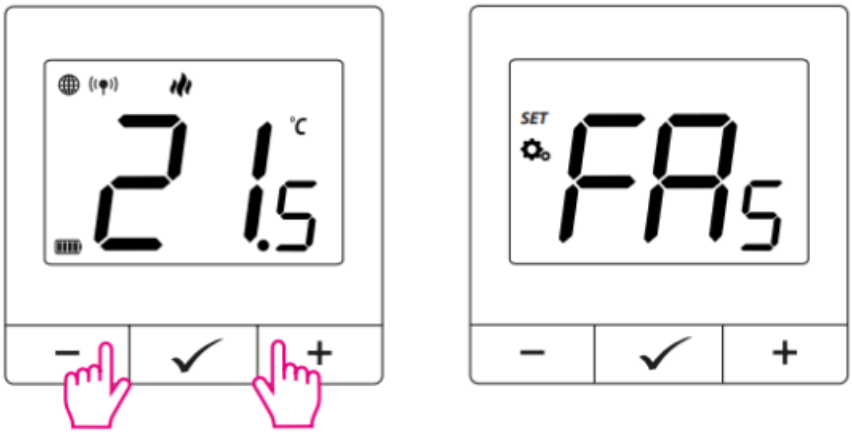
Use – or + button to move between parameters. Enter the parameter by ✓. Edit the parameter using – or +. Confirm the new parameter value with the ✓ button.

Installer parameters

Pxx	Function	Value	Desaipbon	Defau value
P01	Heating/Cooling Selection		Heating	
			Cooling	
P02	Control algorithm On Cooling mode TPI algorithm is unaval atle)	PI UFH	TPI for Underfloor Heating	HIS 0.4
		TF1 RAD	TPI for Radiators	
		TPI ELF	TPI for Electrical Heating	
		HIS 0.4	SPAN +/-0,2°C	
		HIS 0.8	SPAN +/-0,4°C	
		HIS 1.2	SPAN +/-04°C	
		H151.6	SPAN +/-0,8°C	
		HIS 2.0	SPAN +/-1,0°C	
		HIS 3.0	SPAN +/-1,5°C	
		HIS 4.0	SPAN +/-2,0%	
P03	Offset temperature	-3 5°C to '+3S'C	If the thermostat indicates wr ong can correct you ollect it b y ±33°C	0°C
P04	Relay type	NO	Normally Open type of relay	NO
		NC	Normally Closed type of rela y	
P05	Minimum setpoint	5°C – 20°C	Minimum heating / cooling te mperature that can be set	5°C
P06	Maximum setpoint	20,5°C -35°C	Maximum heating / cooling te mperature that can be set	35°C
P07	PIN Code	NO	Function (tabled	NO
		PIN	Function enabled	
P08	PIN Code value	000-m	User PIN	000
P09	Require a PIN to unlock the k eys every time (Active when P07=PIN)	NO	Function disabled	
		YES	Function enabled	NO
CLR	Restoration default value	NO	No	NO
		YES	Yes	

Factory reset

To RESET Thermostat to factory settings, hold down the – and+ buttons until the FA message appears. Then release the keys. Thermostat will restart, restore defaultfactory settings and displays the home screen. The device will be removed from the app you will needto add it again.



After the reset, the devices are still paired.

Ver. 1.5
Release date: X 2024
Soft: Main module v2.0.2
MCU v1.7.0

Works with the app
ENGO SMART App
GET IT ON Google Play
Available on the App Store
Powered By
tuya
Hey Google
works with alexa

Producer:
Engo Controls sp. z o. o. sp. k.
43-262 Kobielice
Rolna 4 St.
Poland
www.engocontrols.com

Documents / Resources

	ENGO CONTROLS E20i-TXW Smart Thermostat Wifi [pdf] User Guide E20i-TXW, E20i-TXB, E20i-RX, E20i-TXW Smart Thermostat Wifi, E20i-TXW, Smart Thermostat Wifi, Thermostat Wifi, Wifi

References

- ENGO Controls - Sterowanie ogrzewaniem
- User Manual