

INFRARED HEATER | CRYSTAL



MODELS | Crystal 350
Crystal 520
Crystal 700

- INSTALLATION INSTRUCTIONS
- USER MANUAL
- WARRANTY CARD



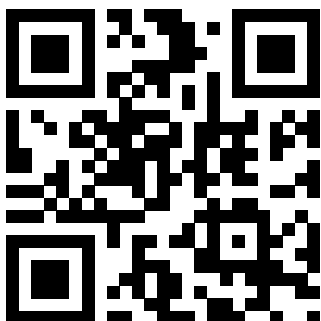
WARNING!

Please read these instructions carefully before installing the **CRYSTAL** heater. Keep these instructions for future reference.

THERMOVAL POLSKA S.A.
ul. Okulickiego 21
05-500 Piaseczno, Poland
e-mail: trade@thermoval.pl
www.thermoval.pl



The product complies with the requirements
of the relevant European Union directives.



Manufactuter:

Thermoval Polska S.A.

ul. Okulickiego 21

05-500 Piaseczno, Poland

tel. +48 22 853 27 27

e-mail: trade@thermoval.pl

www.thermoval.pl

Dear Customer,

Congratulations on your purchase of a THERMOVAL® electric infrared heater. We make every effort to ensure that our products meet the highest quality standards. We hope that your new device will provide you with the comfort you expect and that you will be completely satisfied with your purchase. The Crystal heater is a modern infrared heater designed for heating residential, office, retail and similar indoor spaces. The heating element of the heater is a carbon crystal heating film.

TABLE OF CONTENTS

1. General remarks	p. 2
2. Preparation for use	p. 2
3. Safety	p. 3
4. Heater installation	p. 4
5. Operation	p. 5
6. Description of functions	p. 6
7. Technical specifications	p. 7
8. Maintenance	p. 7
9. Wi-Fi connection	p. 8-12
10. Warranty terms	p. 13

Package contents:

- 1 x infrared heater
- 1 x remote control
- 4 x wall-mounting brackets
- 2 x feet
- 4 x mounting screws
- 1 x user manual

GENERAL REMARKS

Please keep the **proof of purchase, this manual, the warranty card and the packaging** for the duration of the heater’s warranty period. When purchasing the heater, make sure that the device is functioning properly and is free from mechanical damage. Check that the warranty card has been completed correctly and that it bears the seller’s stamp. The warranty card provided with the device cannot be replaced if lost.

PREPARING THE HEATER FOR USE

Remove the heater from its packaging. We recommend keeping the packaging for future use in case the heater needs to be disassembled and stored for an extended period. If the heater has been stored or transported at a low temperature (risk of condensation), allow the device to reach room temperature for at least 2 hours before connecting it to the power supply. Determine the location where the heater will be used. The heater should not be installed in passageways, under openable furniture or in areas exposed to direct sunlight. Check that the electrical installation and its protective devices to which the heater will be connected are suitable for the electrical load of the device. If necessary, contact the seller or a qualified service technician.

SAFETY

- Before using the heater, read the instruction manual carefully. Keep the manual for future reference and ensure that it is passed on with the appliance if the heater is transferred to a new owner.
- Before use, check that the heater and all supplied accessories are complete and undamaged.
- The heater must be installed in accordance with the installation instructions. Connect the appliance to a power outlet that meets the following requirements: ****~230 V AC, 50/60 Hz****.
- The heater is intended for ****indoor use only****. Do not use outdoors.
- Do not leave the heater unattended while in operation. Use and store the appliance out of the reach of children. ****Risk of burns.****
- Do not use an external controller to operate the heater. Do not set the appliance to switch on automatically while it is left unattended.
- Do not use the heater near flammable or explosive materials. ****Risk of fire or explosion.****
- Do not touch the metal housing, as it becomes hot during operation. ****Risk of burns.****
- Before switching off the appliance and storing it, allow it to cool down completely.
- If the heater will not be used for an extended period, disconnect it from the mains power supply.
- Before each use, make sure that the heater is in good condition and shows no visible signs of damage.
- Do not connect or use the appliance if its housing, power cord or plug is damaged.
- The heating element may be damaged if the heater is dropped or struck. Before each use, check that the heating element is not damaged. Do not use the heater if the heating element is damaged.
- Always unplug the heater before moving or cleaning it. When disconnecting the appliance, first switch it off using the power switch and then remove the plug from the socket. ****Do not pull the power cord.****
- Unauthorized disassembly of the electrical appliance is strictly prohibited. If the heater is damaged, contact a qualified service technician.
- Do not use the heater's power outlet to supply power to other appliances. ****Overloading may cause a fire.****
- ****WARNING:**** Do not cover the appliance. Covering the heater may cause overheating and create a fire hazard.
- Do not place the heater directly below an electrical power outlet.
- If the power cord is damaged, it must be replaced by the manufacturer, an authorized service technician or a similarly qualified person in order to avoid hazards.
- Avoid using an extension cord, as it may overheat and increase the risk of fire.
- Never place the heater where it could fall into a bathtub or any other container filled with water.
- Do not use the appliance in the immediate vicinity of a bathtub, shower or swimming pool.
- Children under ****3 years of age**** must be kept away from the heater unless they are continuously supervised.
- Children aged ****3 to 8 years**** may only switch the appliance on or off provided that it has been placed or installed in its intended normal operating position and they are supervised or have been instructed on the safe use of the appliance and understand the hazards involved. Children aged 3 to 8 years must not plug in, regulate or clean the appliance, or carry out user maintenance.
- This appliance may be used by children aged ****8 years and above**** and by persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge, provided that they are supervised or have been instructed on the safe use of the appliance and understand the hazards involved. Children must not play with the appliance. Cleaning and user maintenance must not be carried out by children without supervision.
- ****WARNING:**** Some parts of this product can become very hot and cause burns. Particular attention must be paid when ****children or vulnerable persons**** are present.

WARNING! To avoid overheating, do not cover the heater.

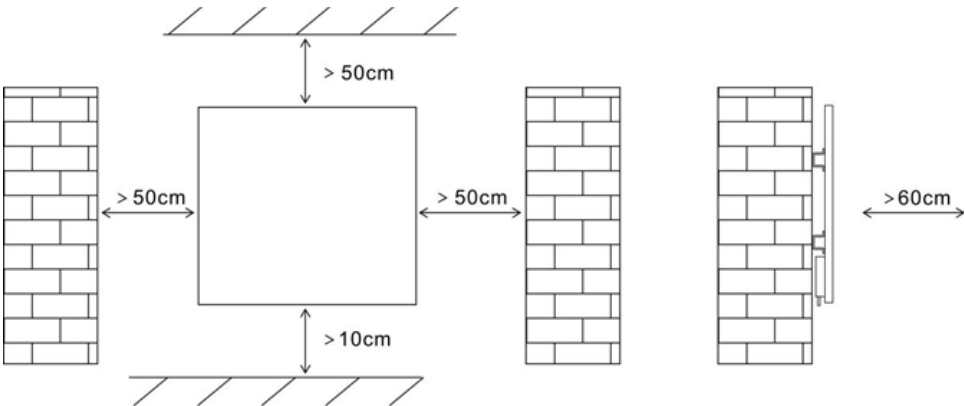


DO NOT:

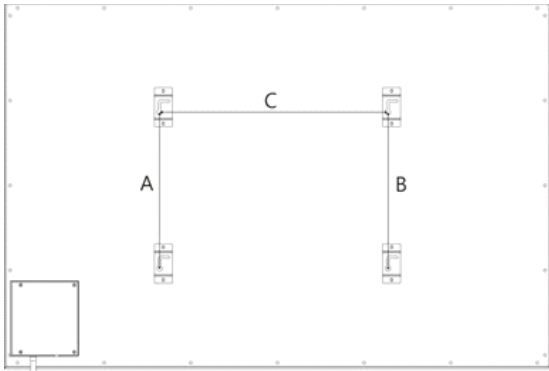
- partially or completely cover the surface of the heater;
- switch the device on if it is covered;
- use the heater if its power cord is damaged;
- place any objects in the immediate vicinity of the heater or directly in front of it;
- install the device directly below an electrical socket;
- use the device directly next to a bathtub, shower or swimming pool;
- touch the plug or electrical connections with wet hands.

HEATER INSTALLATION

1. The kit supplied in the package is designed for mounting on a solid wall. If mounted onto other types of walls, you will need appropriate fixings (not supplied). Please make sure the wall is safe to mount. We highly recommend to have the panel installed by a qualified electrician. The heater must be at least 50 cm removed from all objects, walls, etc.; the distance to the floor must be at least 10 cm. The distance between the back of the radiator and the wall should be 4 cm.



2. Mark the wall according to the dimensions given below for the heater models you purchased, drill the wall and insert the plastic wall anchors into the holes and tighten the screws. Please note the screws expose at least 0.8cm.



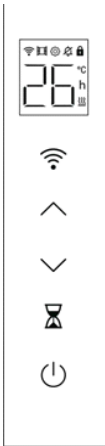
Distance	Crystal 350	Crystal 5 20	Crystal 700
A	256 mm	256 mm	256 mm
B	256 mm	256 mm	256 mm
C	256 mm	376 mm	576 mm



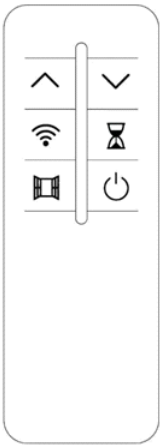
NOTES

Prior to drilling the wall, ensure there are no cables or pipes within the wall and ensure that the mounting screws are fixed firmly to guarantee that the heater is safely mounted to the wall.

CONTROL



Control Panel



Remote Control

Table of icon and button labels

	Button On/Off		Sound off icon
	TIMER button		Locked icon
	Down arrow: Decrease button		Heating icon
	Up arrow: Increase button		Calibration of the thermostat
	Wi-Fi button		Displaying the time and temperature
	Open Window Detection Button		

FUNCTION DESCRIPTION

1. Switching the Heating On/Off

Press the ON/OFF button to switch the heater on or off.

2. Temperature Setting

By default, the control panel displays the ambient temperature. Press the Up/Down arrow buttons to set the desired temperature. The temperature adjustment range is 5 to 50°C.

3. TIMER Setting

Press the TIMER button to activate the timer function and set the time after which the heater will switch off. In this mode, press the TIMER button to set the operating time from 1 to 24 hours. Once the set time has elapsed, the heater will switch off.

4. Control Panel Lock

Press and hold the ON/OFF button to lock the control panel. Press and hold it again to unlock the device. When the panel is locked, the lock icon appears on the display. When the panel is unlocked, the icon disappears.

5. Temperature Calibration

Press and hold the TIMER button to enter the thermostat calibration procedure. The temperature adjustment range is -9°C to +9°C. Use the Up/Down arrow buttons to set the calibration value. Once the temperature has been adjusted, a calibration icon will appear on the display.

6. Muting the Control Panel Buttons

Press and hold the Down arrow button to disable the acoustic signal. The mute icon will appear on the display. To enable the sound again, press and hold the Down arrow button once more. The mute icon will disappear from the display.

7. Open Window Detection Function

If the ambient temperature drops by 4°C within 30 minutes, the open window detection function is activated. The heater will stop heating and the open window icon will flash on the display. To return the heater to its previous operating state, press the ON/OFF button. The flashing icon will disappear and the heater will resume its previous operating mode. After the open window detection function has been activated, press and hold the Up arrow button to switch the function off. The function icon will then disappear from the display.

8. Wi-Fi Function

Press and hold the Wi-Fi button to put the heater into app pairing mode. The network configuration mode is indicated by the icon flashing either rapidly or slowly. The maximum network configuration time is 120 seconds. After this time, press and hold the Wi-Fi button again to restart the pairing process.

9. Heating Icon

The heating icon appears on the display when the temperature set on the control panel is higher than the measured ambient temperature, indicating that the heating function has been activated.

10. Remote Control

The remote control buttons perform the same functions as the buttons on the control panel. The remote control is factory paired with the heater. However, one heater can only be paired with one remote control. To pair the remote control, press and hold the Wi-Fi and ON/OFF buttons simultaneously. The control panel will emit a sound and enter remote-control pairing mode. Then press any button on the remote control. The heater and remote control will pair successfully. To cancel the pairing, press the Wi-Fi button on the heater twice. The heater will emit nine audible signals, confirming that the pairing has been cancelled.

PLEASE NOTE! This product is intended for indoor use only.

TECHNICAL SPECIFICATIONS

Mains voltage: ~ 230 V ± 5%
 Frequency: 50 Hz ± 5%
 Power lead length: 1,8 m
 Temperature control range: 5 - 50 °C
 Enclosure protection rating: IP24
 Heating element: carbon crystal
 Housing: powder-coated sheet steel
 Housing colour: white, RAL 9016
 Wi-Fi band: 2.4 GHz, IEEE 802.11 b/g/n
 Transmission power: 17,5 dBm

Model of heater	Heat output [W]	Rated current [A]	Protection class	Dimensions [HxWxD] [mm]
Crystal 350	350	1,5	I	600 x 600 x 50
Crystal 520	520	2,3	I	600 x 900 x 50
Crystal 700	700	3,0	I	600 x 1200 x 50

MAINTENANCE

Cleaning

Before carrying out any maintenance, always switch off the appliance and allow it to cool down completely. Clean the appliance's housing with a damp cloth, then dry it with a dry cloth. Do not immerse the appliance in water or allow water to drip onto it.

Storage

Before putting the appliance into storage, always unplug it from the socket, clean the heater and allow it to cool down completely. If the heater is not going to be used for an extended period, place it, together with the user manual, in the original box and store it in a dry, well-ventilated place. Do not place heavy objects on top of the box whilst it is in storage, as this may damage the heater.

Product data and information, in accordance with Directive 2009/125/EC

Heater model:	Crystal 350	Crystal 520	Crystal 700
Heat output			
Nominal heat output P_{nom} , kW	0,35	0,52	0,7
Minimum heat output (approximate) P_{min} , kW	N/D	N/D	N/D
Maximum continuous heat output $P_{max,c}$, kW	0,35	0,52	0,7
Electricity consumption for own use			
At nominal heat output (e_{lmax}), kW	0,35	0,52	0,7
At minimum heat output (e_{lmin}), kW	N/D	N/D	N/D
In standby mode (e_{lsb}), kW	N/D	N/D	N/D
Type of heat output/room temperature control	Electronic thermostat		
N/A – not applicable			
Contact details	Therموال Polska S.A. ul. Okulickiego 21, 05-500 Piaseczno, Poland		

APP USER MANUAL – Wi-Fi CONNECTION



TUYA Smart



Smart Life

To connect the heater to a Wi-Fi network, first download the Smart Life or TUYA Smart app to your smartphone or tablet. You can download the app by scanning one of the QR codes below or by searching for it manually in the Google Play Store or Apple App Store.

Smart Life



Tuya Smart

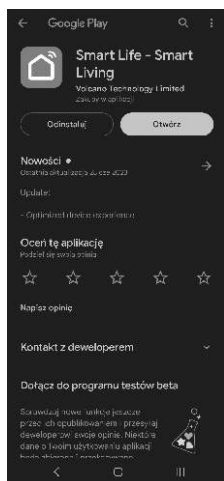
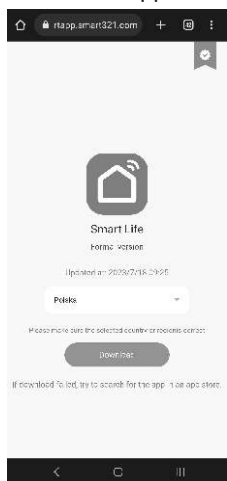


Example: Android users using the Smart Life app

After scanning the QR code, your default web browser will open automatically. Once the page opens, tap the “Download” button. You will then be redirected automatically to the Google Play Store.

Download and install the Smart Life app.

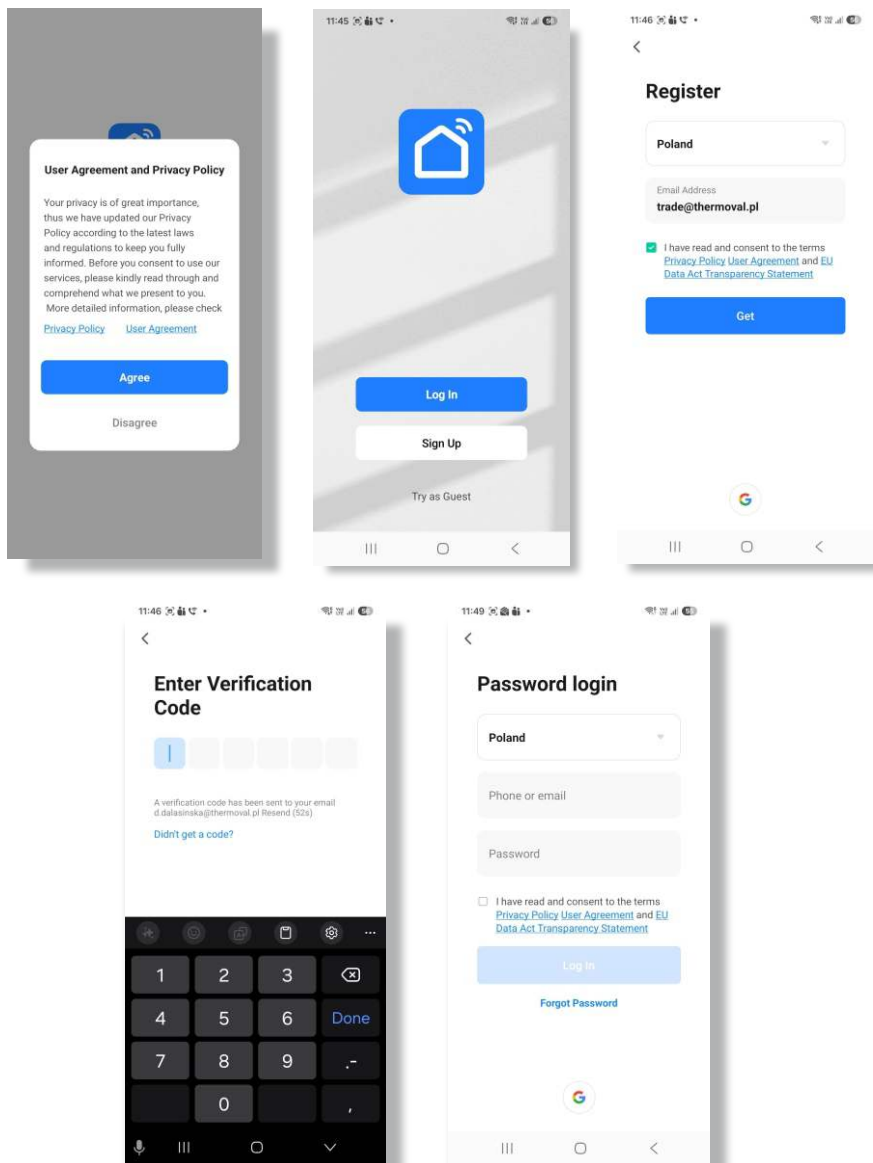
The installation process is similar for Apple/iOS devices.



Creating an Account in the App

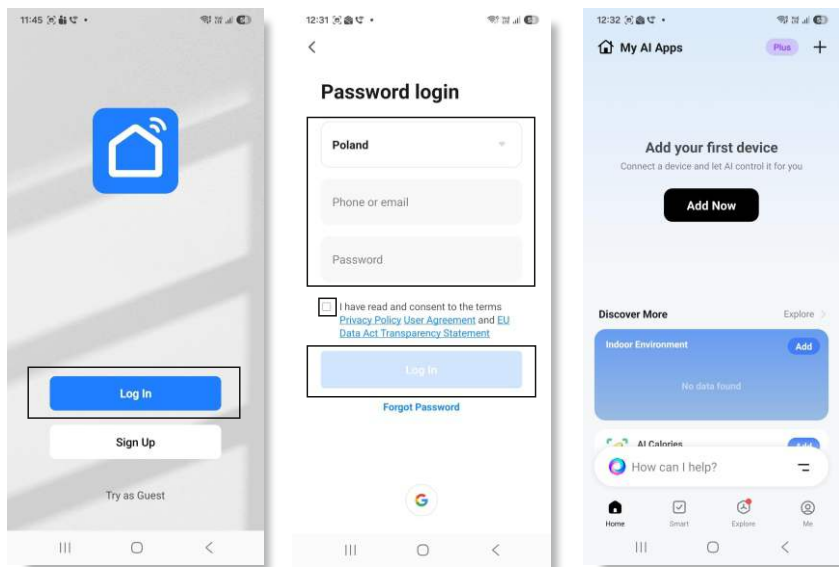
After installing the app, you can launch it and create an account.

Once the app opens, the Privacy Policy will be displayed. Tap “Agree” to continue. The main screen will then appear. If you do not already have an account, tap “Register”. The app will open the registration screen. Select your preferred language, enter your e-mail address, and confirm the verification code. Then tap “Agree”. After verifying the information, tap “Get verification code”. Enter the verification code sent to the e-mail address you provided. Set a password for your account. The password must contain 6 to 20 characters, including letters and numbers.



Logging in to the App

Go to the login screen by tapping “I already have an account” on the main screen. Enter your e-mail address in the “Enter account” field and your password in the field below. Confirm your consent, then tap “Log in” to save the entered details. Once the information has been entered correctly, the main app interface will be displayed.

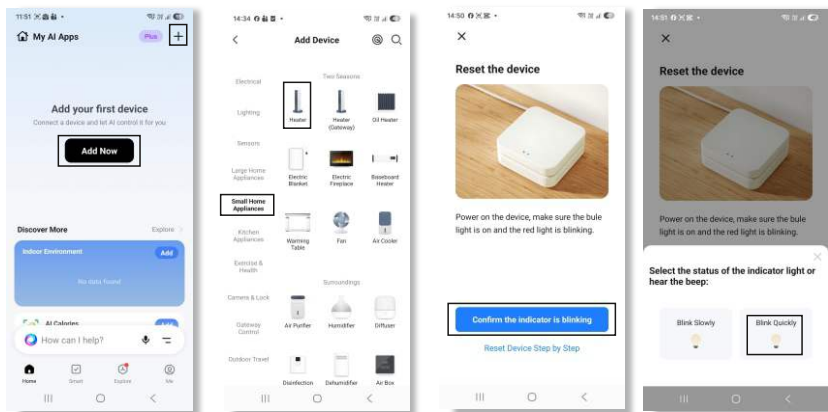


Activating the Wi-Fi Module in the Heater

To add the heater to the app, first switch it to Wi-Fi pairing mode. Press and hold the “Wi-Fi” icon. The Wi-Fi indicator on the heater will start flashing, indicating that the device is ready to connect to the app. If the icon is not flashing, switch the heater to standby mode and press and hold the Down arrow button for 3 seconds.

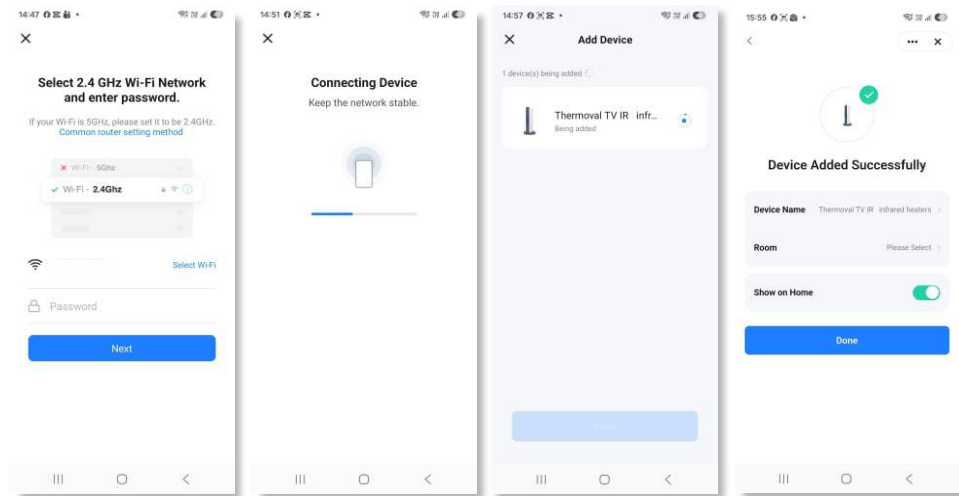
Connecting to the App

When the icon starts flashing, go to the app's main screen and tap “Add Device” or the “+” icon. Select the device type (small household appliances → heater / Wi-Fi) and follow the on-screen instructions. The app will then display a screen confirming the Wi-Fi indicator flashing speed. Tap the blue button, then select the appropriate flashing mode.



Entering the Details and Selecting the Connection Mode

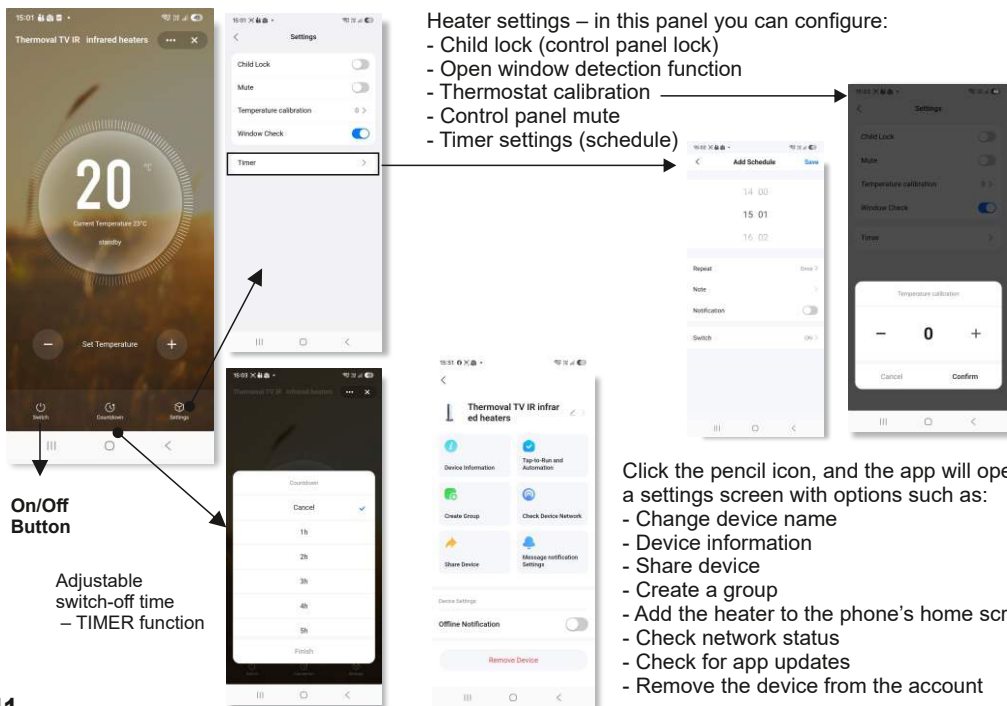
The next step is to enter your router details. Enter the Wi-Fi network name and password in the appropriate fields, then tap "Next". Thanks to the app, you can find your Wi-Fi network in just a few moments. The app will then enter the connection mode and begin adding the heater to the cloud. Connecting to Wi-Fi should take approximately 20–30 seconds. Once the device has been successfully added, tap "Done". The app will then switch to the heater control panel.



Controlling the Heater via the App

Heater settings – in this panel you can configure:

- Child lock (control panel lock)
- Open window detection function
- Thermostat calibration
- Control panel mute
- Timer settings (schedule)



On/Off Button

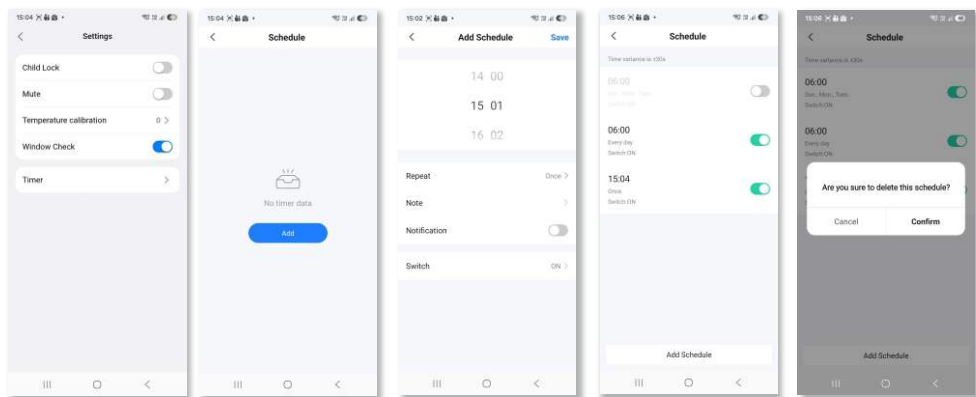
Adjustable switch-off time – **TIMER** function

Click the pencil icon, and the app will open a settings screen with options such as:

- Change device name
- Device information
- Share device
- Create a group
- Add the heater to the phone's home screen
- Check network status
- Check for app updates
- Remove the device from the account

Timer – Schedule Setting

In the app, go to the heater settings screen and tap “TIMER” to open the schedule list. To create a new schedule, tap “Add”. In the “Add Schedule” panel, you can set the time at which the device should switch on or off, select the days of the week on which the schedule should be active, add a note, and choose whether a notification should be sent when the schedule is activated. To delete a schedule, press and hold the selected schedule, then tap “Confirm”.



Simplified EU Declaration of Conformity (RED) Radio Equipment Directive

In accordance with Article 10(9), Thermoval Polska Spółka Akcyjna hereby declares that the radio equipment type infrared heater, Thermoval CRYSTAL model, is in compliance with Directive 2014/53/EU.

The full text of the EU Declaration of Conformity is available at: www.thermoval.pl



Products marked with this symbol must not be disposed of with household waste. They should be collected separately and recycled. The collection and recycling of end-of-life products must be carried out in accordance with applicable local regulations (WEEE Directive 2002/96/EC).

WARRANTY CONDITIONS

1. MANUFACTURER / GUARANTOR

Thermoval Polska S.A., ul. Okulickiego 21, 05-500 Piaseczno, Poland

www.thermoval.pl

The direct legal responsibility lies with the Regional Seller or the authorized Installer performing the product installation service. Any quality claims shall be addressed by the customer primarily to these regional business entities.

2. WARRANTY SCOPE

Thermoval grants a quality warranty for the Product covering physical defects of the Product that have arisen from causes inherent in the Product and are related to the material used or the method of manufacture (hereinafter referred to as the "Defect"), and undertakes to remove such Defects free of charge if they occur within the period specified in point 4.1 below, referred to as the Warranty Period.

3. RIGHTS ARISING FROM THE WARRANTY

3.1. If a Defect in the Product becomes apparent during the Warranty Period, the Guarantor undertakes to remedy the Defect by performing a free repair of the defective Product.

If repair is not possible or if the repair cost exceeds the sale price of the defective Product, the Guarantor has the right to withdraw from the repair and refund the full purchase price paid for the defective Product, or to replace the defective Product with one free of defects.

3.2. In the event of property damage, Thermoval shall cover costs up to a maximum of twice the value of the defective Product, if the damage was caused directly by the defective Product or is an unavoidable consequence of its repair.

Except for such costs and damages, Thermoval shall not be liable for any losses or indirect or consequential damages, including but not limited to damage to other property or increased utility costs. After the repair has

4. WARRANTY PERIOD AND TERRITORIAL SCOPE

4.1. The Warranty Period, calculated from the date of purchase, is as follows:

For all models of electric heaters 2 years

4.2. The territorial scope of the warranty covers the territory of the countries belonging to the European Union.

5. CONDITIONS FOR CLAIMING THE WARRANTY

The condition for exercising the rights under the Warranty is:

5.1. For electric heaters, regulators, controllers, and water heaters
Submission of proof of purchase and a duly completed warranty card.

- 1) operation of the Product in accordance with its intended purpose and the installation and operating manual,
- 2) reporting the Defect to the Guarantor under the terms and within the time limits specified in the Warranty Conditions.

Note! The warranty for the heating mat or heating cable becomes invalid if a properly completed Warranty Card or proof of purchase is not provided.

6. COMPLAINT SUBMISSION

6.1. The complaint must be submitted immediately after detecting a product defect, directly to:

- the Regional Seller (Regional Guarantor)
- the Installer who performed the installation of the claimed Product (Installation Guarantor)

6.2. The complaint must be submitted no later than within 2 (two) months from the date the Defect was discovered. Sending the complaint before the deadline is sufficient to meet this requirement. Failure to submit the complaint within this period results in the loss of rights specified in point 3 above.

The complaint may be submitted directly at the Seller's or Installer's business location, or by email.

Telephone complaints will not be accepted unless otherwise agreed by the parties.

The business address and email address are provided by the Regional Seller or Installer.

6.3. The Guarantor shall review and respond to the Complaint, and notify the customer of its acceptance or rejection without delay, but no later than 14 days from the date of submission of the Complaint.

Note! The warranty becomes void if repairs are carried out by persons other than an authorized installer or one designated by Guarantor.

7. WARRANTY EXCLUSIONS

The warranty does not cover damage or defects of the Product arising from causes other than those inherent in the Product. The warranty does not cover:

- 1) mechanical damage and defects resulting therefrom,
- 2) damage resulting from improper installation (not in accordance with the Product installation and operating manual) and resulting defects, in particular: connection to an incorrect electrical power supply system that does not meet the applicable standards for single-phase 230V 50Hz networks (connection to an electrical installation lacking overcurrent and residual current protection or being in poor technical condition),
- 3) damage caused by external factors, such as fire, flood, or lightning strike,
- 4) damage resulting from improper storage or use (not in accordance with the intended purpose or the installation and operating manual) and resulting defects,
- 5) damage resulting from the use of improper installation components or consumable materials (not in accordance with the Product installation and operating manual) and resulting defects,
- 6) damage resulting from improper electrical voltage in the Product's power supply installation and resulting defects,
- 7) defects resulting from repairs carried out by the Buyer on their own initiative.

8. ADDITIONAL DECLARATIONS OF THE GUARANTOR

This Warranty does not exclude, limit, or suspend the Buyer's rights arising from statutory provisions regarding defects in the sold goods.

9. PERSONAL DATA PROTECTION

9.1. The Guarantor informs that, in the event of warranty claims, the controller of personal data of the individual submitting the complaint is Thermoval Polska S.A., ul. Okulickiego 21, 05-500 Piaseczno, Poland, www.thermoval.pl, email: trade@thermoval.pl