



SUNDIRECT
INFRARED HEATER

TH400

Smart Infrared bathroom Heater



Installation & Operation Instructions

Version: SDUM-1804

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1. Notice to Purchaser

Thanks for purchasing this Sundirect infrared heater. We hope you enjoy this innovative technology and that this product will bring a pleasant atmosphere to your home.

Please read these instructions carefully and keep safe for future use. Failure to comply with these instructions will void your warranty. Do not disassemble or tamper with the product at any time! Please pay special attention to the safety instructions and use the heater according to these instructions. Sundirect Technology Ltd. shall not be liable for any damage or loss occurred resulting from failure to follow these instructions.

2. General Introduction

Sundirect Infrared heaters heat objects instead of the air, making this heater much more efficient than traditional convection heaters.

The TH400 represents a new generation of infrared bathroom heaters, equipped with our "Smart Easy" Wi-Fi enabled touchscreen control box on the backside of the glass.

With "Sundirect Smart" APP, you have advanced room temperature control including

- Manual mode: simple temperature control and timer function
- Smart mode: 7days program, 4 time zones per day
- Holiday mode: set up a fixed temperature during your absence and automatically switch back to normal settings after your holiday

The set up process is very simple and can be finished within few minutes. Even if your WIFI is disabled, the heaters can still be controlled manually.

Read the installation and operating instructions completely before starting any installation works and save the instructions for later use.



3. Safety instructions

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR INJURY:

3.1 Product related safety warnings

- Sundirect infrared heaters operate at a surface temperature of around 75-85°C when mounted. Do NOT touch the heater when switched on.
- Prolonged contact may cause injuries or burns.
- Do NOT cover the heater with anything. Covering may cause overheating and can result in fire.
- This heater is designed to be wall mounting, please don't mount them on the ceiling.
- This can be easily operated using your smartphone, via the same WLAN, via a different WLAN, or via a 3G or 4G mobile network. This makes it possible to operate your heater remotely, without your direct supervision. However, please make sure that all safety precautions stated in this manual must be taken even with remote operation.

3.2 Dangers for children and persons with limited abilities

- Children or persons with limited physical, mental or sensory abilities shall not be operating, switching on, plugging in, regulating or cleaning the heater.
- Small children should be kept away from the heater unless constantly supervised.
- Do NOT operate the heater in small rooms when occupied by people not capable of leaving the room by themselves. The surface of the heater can reach a surface temperature of up to 95°C, keep out of reach of children and disabled persons.
- Keep away babies and children from all packaging material such as plastic bags to avoid danger of suffocation.

3.3 Electric safety directions

- When installing, repairing or servicing the heater it must be turned off and disconnected from power. Before installation please check if the heater is free of damages.

- If the heater or the power cord is damaged in any form do NOT use the heater and contact your Sundirect dealer for repair or replacement. Repairs, maintenance or any changes must be carried out by an authorized Sundirect dealer.
- Do NOT attempt to repair the heater by yourself, this will void your warranty.
- If the heater has been dropped do NOT operate it and contact your Sundirect dealer to make sure it is free of any damages.
- If the safety glass is damaged in any way please dismount the heater as soon as possible to avoid any injuries from possible impact of the falling glass.
- Sundirect heaters are designed to operate at 220-240V, 50Hz AC. If your supply mains do not comply with this, do NOT use the heater.

3.4 Water Proof

This heater is IP44 rated, meaning you are safe to use them in the bathroom.

However, when installing the heater in humid rooms it must be secured in such way that there is no risk of the heater falling into any water container. Never pour water on the device or put it in a water container.

Sundirect shall not be liable for any injuries or damages resulting from inadequate mounting or incorrect positioning close to water sources.

4. How to care for your Sundirect heater

4.1 Cleaning

Always unplug your heater and let it cool down completely before cleaning. Never dip into water and never splash water on it. Clean the heater with a soft damp cloth. Do not use any abrasive materials, solvents or harsh cleaning sponges as this could cause scratches or other irreparable damage.

4.2 Using/Working

If you notice any noise, smells, visible changes or exceptionally high temperatures please discontinue use and contact an authorised Sundirect dealer.

4.3 Repair

Repairs must be carried out by authorised Sundirect dealers or by Sundirect directly. If you attempt to alter the product or to proceed with any repairs yourself it will void your warranty.

4.4 Disposal

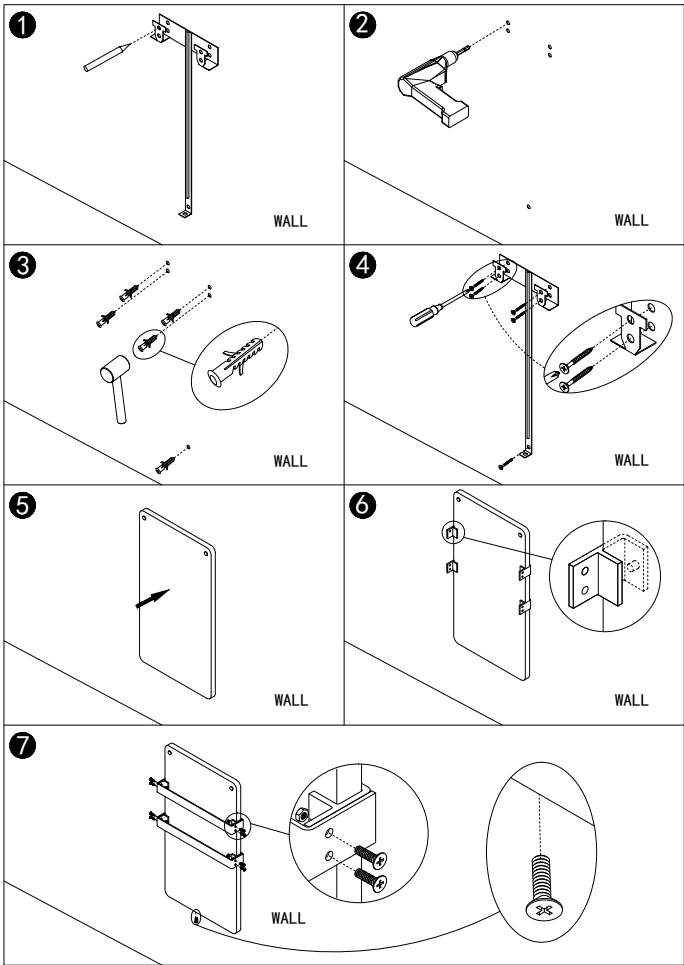


Sundirect infrared heaters are electric appliances and therefore electric waste. At the end of its working life please dispose the heater in accordance with local regulations concerning electric waste.

5. Installation

5.1 Mounting installation instruction

Note: The kit supplied in the package is designed for mounting vertically 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 or installer authorized by Sundirect.



Step 1. Use the mounting bracket to mark the position of the hole on the wall.

Step 2. Drill holes using a 8mm drill.

Step 3. Insert the dowels into the holes.

Step 4. Install the bracket on the wall.

Step 5. Mount the panel on the bracket.

Step 6. Insert the plastic part to the side of the glass according to the drawing.

Step 7. Fix the towel rails to the plastic part and screw in the middle bottom part of the heater to secure the mounting.

5.2 Electric power connection

Installation and electric connection should only be carried out by qualified personnel such as an electrician. National electric safety standards must be considered when wiring to this panel.

Make sure the mains power is switched off before you start the installation when hardwiring. Any fixed wiring outside the heater coming into contact with the heater must have a protection sleeving that is heat resistant of at least 90°C. Make sure that cables are not coiling and that there is no excess cable behind the heater. The length of the cable should be measured exactly to the length needed. Do not connect a heater that is damaged in any way to the power network. Before installation make sure that the heater, cable and plug are completely free from damages. When in doubt contact your local Sundirect dealer for assistance.

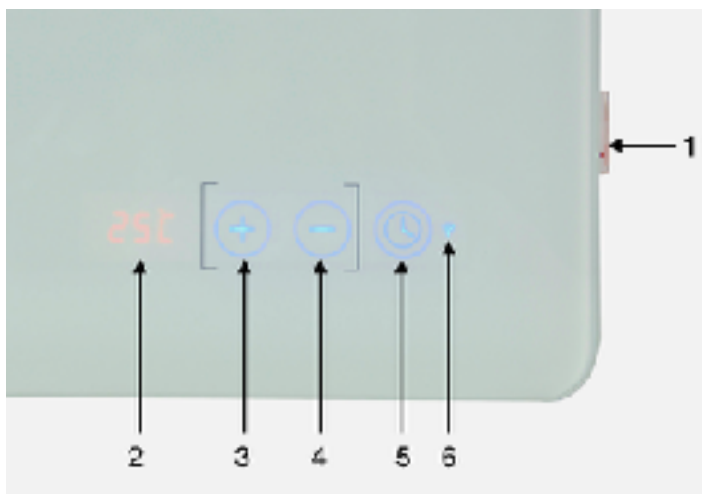
6. Operation:

6.1 General introduction of the smart control

The TH400 has already had the integrated Wi-Fi touchscreen control box, there is no other additional thermostat is needed to control your heater. The panel can either work manually with the manual control touch screen on the right bottom of the glass surface or be operated via your smartphone. Once the heater has been connected to the APP, the smart phone will take the control together with the control box. If your home internet is not working it is still possible to operate the heater via the touchscreen, power off the heater and power on again after few seconds, the heater can be operated manually via the touchscreen, once the heater is re-connected to the WiFi, the heater will be controlled by both smart phone automatically.

6.2 Touch screen description:

1. Power switch
2. Screen
3. "+" button
4. "-" button
5. Timer
6. Wi-Fi indicator



6.3 Manual control:

Activate the **Power switch**, the screen will show the current room temperature reading, adjust your desired room temperature by pressing **"-" or "+"** button.

To set up the timer manually, you can press the Timer button, and the screen will show "1H"- meaning the heater will operate on the countdown timer and will power off after 1 hour. Press again to shift to "2H", then "3H" and so on(Up to 24hours)

6.4 Wi-Fi and APP operation:

6.4.1 How to download the Sundirect Smart APP

Scan the QR code below to start the procedure to download the APP, or you can download the APP "Sundirect Smart" on APP Store or Google play, open the APP and register with your phone number or Email address.



6.4.2 Connect to WiFi:



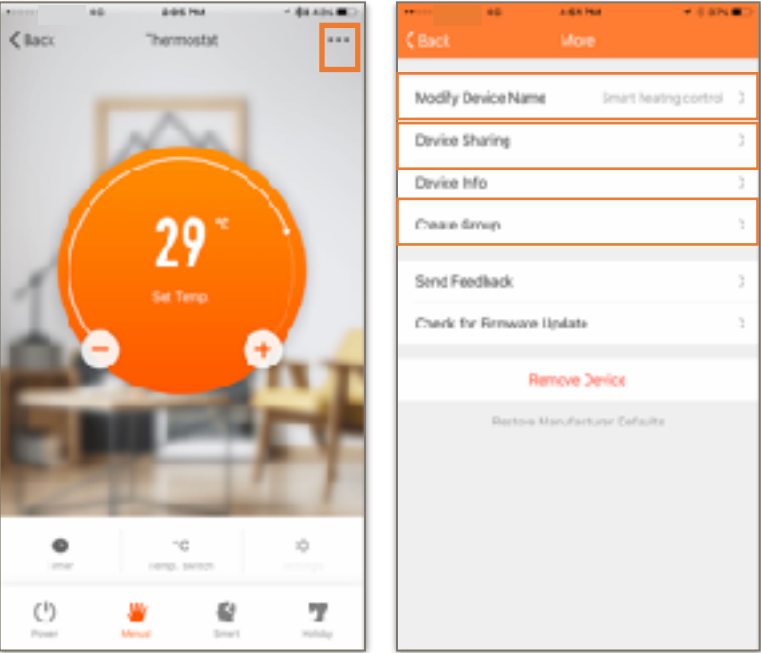
Step1: Activate the Power switch, press the "ON/OFF" button, the Wi-Fi indicator will start to flash rapidly, open the APP on your smart phone and add your device.

Step2: Enter the Wi-Fi password of your home network. Please make sure your home Wi-Fi is working as well as keep the heater and smartphone as close as possible to the WLAN router.

Step3: Waiting till the connecting status shows 100% to finish the process.

If you failed to connect, please power off the heater and power it back on again in few seconds later. Long press the "Timer" button on the touch screen for 10 seconds until the Wi-Fi indicator is flashing slowly and repeat the connection process.

6.4.3 Modify Device Name, Device Sharing and Device group control



Select ... at top right in the control screen and you can modify the device name, operate the device sharing as well as the group control for the same type of APP.

6.4.4 Disconnect the Wi-Fi

If you would like to disconnect the Wi-Fi of your current heater, long press "Timer" button on the touchscreen for 10 seconds until the Wi-Fi indicator start to flashing again. Now the heater is operating manually without Wi-Fi.

7. Technical Specifications

Panels covered by these instructions are listed in the table below.

Model	Power	Size	Weight	Mounting	IP Protection
TH400	400W	44.5*86.5cm	10Kg	Wall mounting	IPX4

8. Warranty

Sundirect offers a 2-year manufacturing warranty on the TH400.

You can find the serial number on the back side of the heater as well as the last page of this user manual. Please always keep this manual in case of future warranty claims.

Within the warranty period from date of purchase, Sundirect will repair or replace your heater where the fault is due to defects in workmanship or materials. Please contact your local Sundirect dealer in the event of a warranty claim and return the heater together with proof of purchase.

The warranty covers the repair or replacement of the heater only and Sundirect shall not be liable for any other occurring costs such as installation cost or any other consequential losses however incurred. Please note that tampering with or opening the heater in any way will void your warranty. The removal of the serial number on the back of the heater will also void this warranty. All labels on the back of the heater shall not be removed.

Any damages to the heater caused by the user are not covered by this warranty. This includes scratches on the surface. Sundirect is not responsible for any damages, losses or injuries due to ingress of water or moisture, accidental damage, mishandling, external impact, repairs or adjustment by unauthorized persons or failure to follow the correct safety, maintenance and installation precautions stated in this manual.

ErP

Information requirement for the electric local space heaters

Models: TH400

Item	Symbol	Value	Unit	Item	Unit
Heat output				Type of heat input, for electric storage local space heaters only(Select one)	
Nominal heat output	Pnom	0.4	kW	manual heat charge control, with integrated thermostat	No
Minimum heat output(indicative)	Pmin	0,0	kW	manual heat charge control with room and/or outdoor temperature feedback	No
Auxiliary electricity consumption				fan assisted heat output	No
At nominal heat output	elmax	0.4	kW	Type of heat output/room temperature control(select one)	
At minmum heat output	elmin	0,0	kW	Single stage heat output and no room temperature control	No
In Standby mode	eISB	0.001	kW	two or more manual stages, no room temperature control	No
				with mechanic thermostat room temperature control	No
				with electronic room temperature control	No
				electronic room temperature control plus day timer	No
				electronic room temperature control plus week timer	Yes
				Other control options(multiple selection possible)	
				room temperature control, with presence detection	No
				room temperature control, with open window detection	No
				with distance control option	Yes
				with adaptive start	No
				with working time limitation	No
				with black bulb sensor	No

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Serial Number of this Sundirect infrared heater is

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