Wed 15 Feb   12:45PM

+

82

82° Until next period

76° Air   ≡   57° ☀

Operating Manual

Wi-Fi

Download on the App Store

amazon alexa

GET IT ON Google Play

LATICRETE STRATA_HEAT

x1   x1   x2   x1
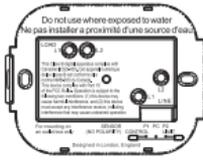
Contents

Safety Information

❑ The STRATA_HEAT™ Smart LCD Thermostat must be installed by a qualified electrician. It requires a permanent 110V – 240V AC, 60Hz supply. The STRATA_HEAT Smart LCD Thermostat contains a Class A GFCI with 5mA trip level and wiring must conform to local electrical code.

❑ Isolate the STRATA_HEAT Smart LCD Thermostat from the mains supply throughout the installation process.

❑ Conduits are only required where it is mandated by state or provincial code. Please refer to local electrical code for compliant applications.

❑ The STRATA_HEAT Smart LCD Thermostat and its packaging are not toys; do not allow children to play with them. Small components and packaging present a risk of choking or suffocation.

❑ The STRATA_HEAT Smart LCD Thermostat is suitable for indoor use only. It must not be exposed to moisture, vibrations, mechanical loads or temperatures outside of its rated values.

❑ For safety and licensing reasons unauthorised change and/or modification of the STRATA_HEAT Smart LCD Thermostat is not permitted.

❑ Ensure the distance from your router to the STRATA_HEAT Smart LCD Thermostat is not excessive. This will ensure the wireless connection is not subject to range or interference issues once installed.

❑ Install the STRATA_HEAT Smart LCD Thermostat in an area with good ventilation. It should not be beside a window/door, in direct sunlight or above another heat generating device (e.g. radiator or TV).

Step 1 – Installation
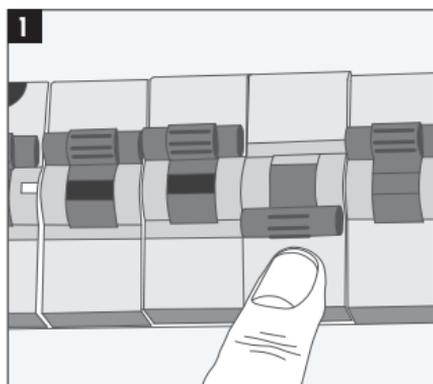
Isolate the STRATA_HEAT Smart LCD Thermostat and supply from the mains supply.
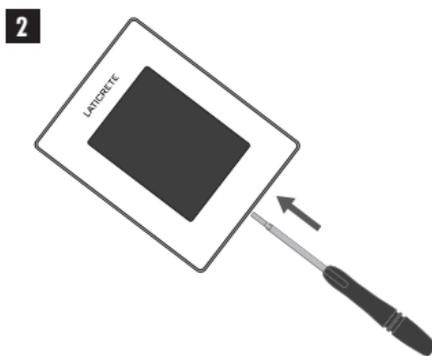
Unclip the display from the power base and remove the display
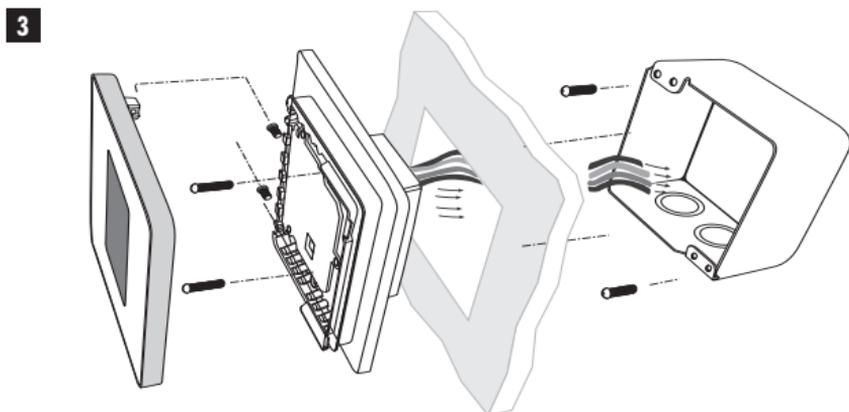
Install a 3–1/2" (89 mm) deep single gang or 2–gang box with mud ring in your preferred thermostat location. Pull wires (heater, supply and sensor) through gang box and complete terminal wiring.

WARNING!
The STRATA_HEAT™ Smart LCD Thermostat must be installed by a qualified electrician in accordance with National Electrical Code.
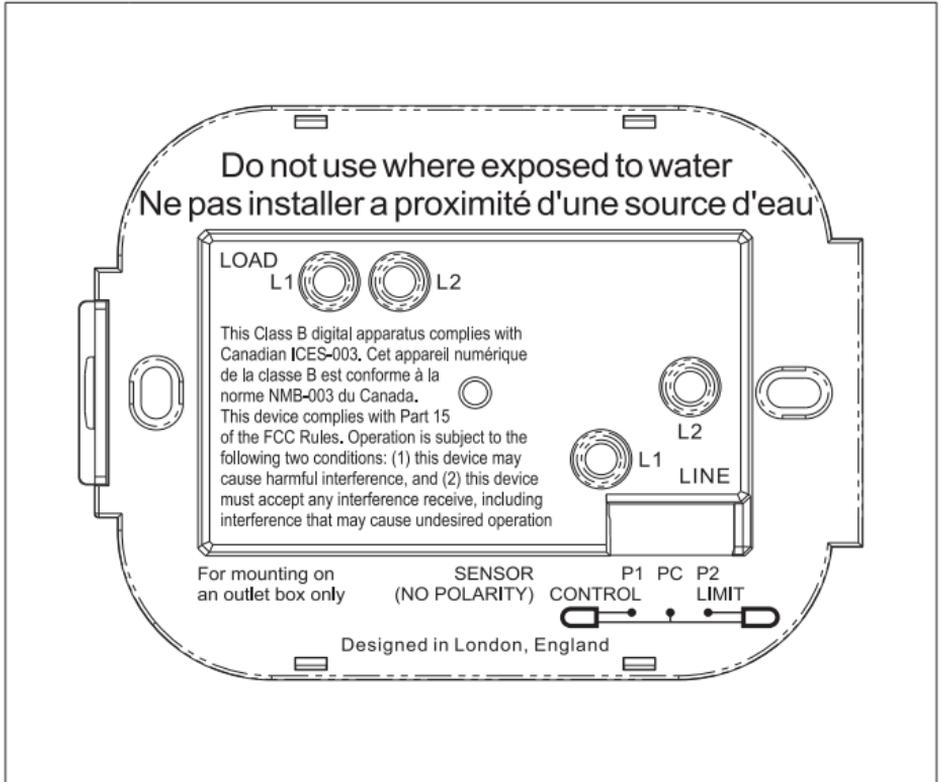
Wiring Connections	
LOAD L1 & L2	Heater Load Max.15A (1800W/120V, 3600W/240V)
LINE L1	Supply Live (120 V)
LINE L2	Supply Neutral (120 V) / Supply Live (240 V)
P1 & PC	**Probe 1 –** Floor/Air Control Sensor (No Polarity) Floor or air temperature reading for scheduled control
P2 & PC	**Probe 2 –** Limit Sensor (No Polarity)
See Table 1.0 for thermostat use cases	

NOTE: The function of Probe 1, Probe 2 from Control/Limit Sensor can be swapped in Advanced Settings; Sensors & Application.

Table 1.0 – Thermostat use cases

hadian ICES-003. Cet appareil numerique
la classe B est conforme à la
me NMB-003 du Canada.
s device complies with Part 15
he FCC Rules. Operation is subject to the
owing two conditions: (1) this device may
use harmful interference, and (2) this device
st accept any interference receive, including
erference that may cause undesired operation

L2
L1
LINE

hounting on   SENSOR   P1 PC P2
tlet box only   (NO POLARITY)   CONTROL   LIMIT

Designed in London, England

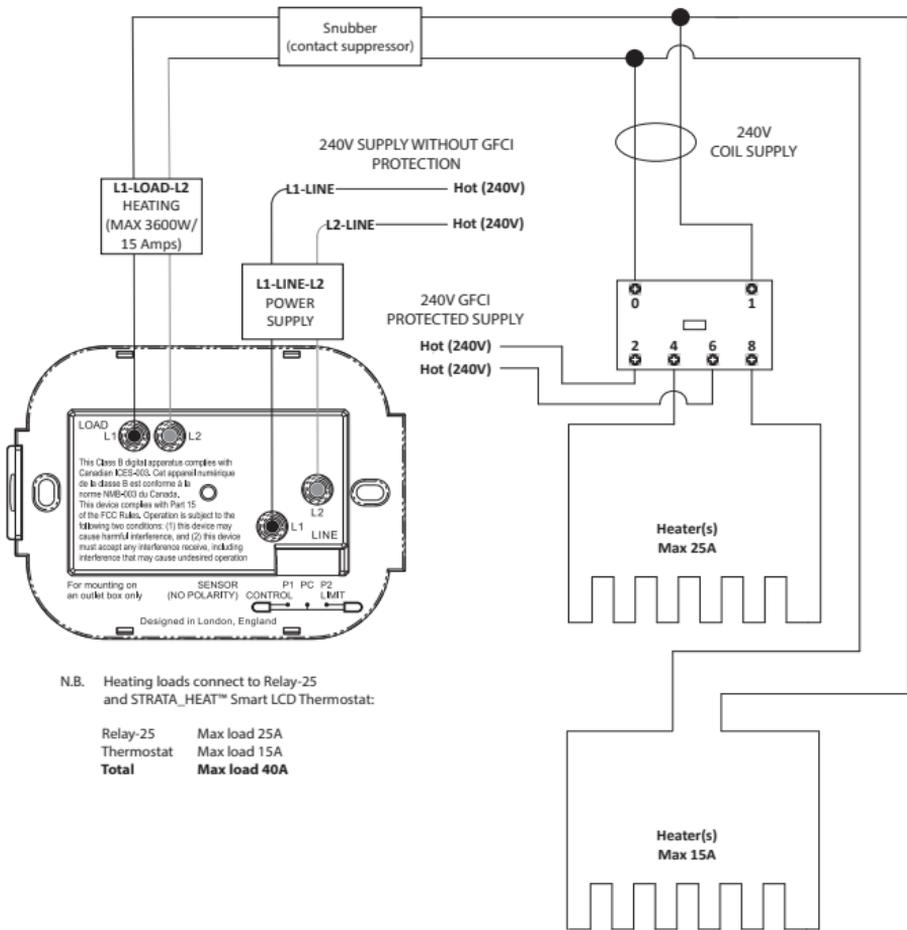| #	Use Case	Control	Limit Sensor
1	Thermostat **IN** room Air temperature schedule No floor limit	**Internal** Air Sensor	None
2*	Thermostat **IN/OUT** of room Floor temperature schedule Floor limit	**P1 & PC** Floor Sensor	None
3	Thermostat **IN** room Floor temperature schedule Air limit	**P1 & PC** Floor Sensor	**Internal** Air Sensor
4	Thermostat **OUT** of room Air temperature schedule No floor limit	**P1 & PC** Air Sensor	None
5**	Thermostat **IN** room Air temperature schedule Floor limit	**Internal** Air Sensor	**P2 & PC** Floor Limit
6	Thermostat **IN/OUT** of room Floor temperature schedule Floor limit	**P1 & PC** Floor Sensor	**P2 & PC** Floor Limit
7	Thermostat **OUT** of room Air temperature schedule Floor limit	**P1 & PC** Air Sensor	**P2 & PC** Floor Limit
8	Thermostat **IN/OUT** of room Regulator schedule No limit	**Reg.**	None
9	Thermostat **IN** room Regulator schedule Air limit	**Reg.**	**Internal** Air Sensor
10	Thermostat **IN/OUT** of room Regulator schedule No limit	**Reg.**	None
11	Thermostat **IN/OUT** of room Regulator schedule Floor limit	**Reg.**	**P2 & PC** Floor Limit
12	Thermostat **IN/OUT** of room Regulator schedule Floor limit	**Reg.**	**P2 & PC** Floor Limit

2*   Recommended when thermostat is **OUT** of the heated room
5** Recommended when thermostat is **IN** the heated room

NOTE: For thermostat use cases 6 & 7 an additional sensor will be required.

Heating Load connected to STRATA_HEAT™ Smart LCD Thermostat and Relay 25 – Max. 40 Amps

N.B.   Heating loads connect to Relay-25 and STRATA_HEAT™ Smart LCD Thermostat:

Relay-25	Max load 25A
Thermostat	Max load 15A
Total	**Max load 40A**

Heating Load connected to Relay 25 – Max. 25 Amps

N.B.   All heating loads connect to Relay-25 only, controlled by STRATA_HEAT™ Smart LCD Thermostat
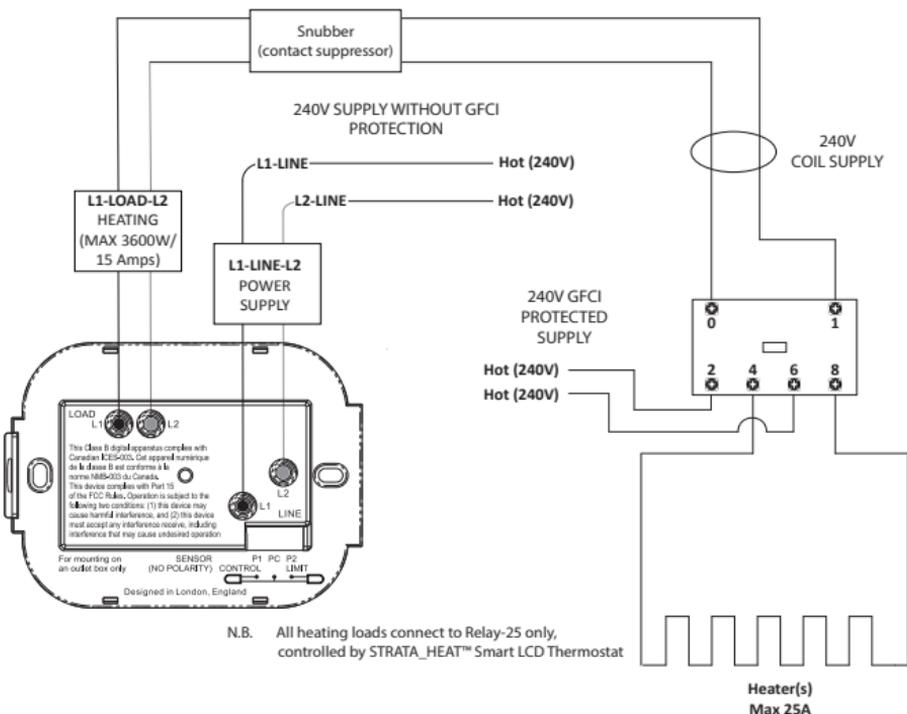
Step 3 – Thermostat Mounting

Insert fixing screws through mounting holes of the power base and tighten.

Re-attach the display to the power base. You can now restore power to the circuit and power up the STRATA_HEAT™ Smart LCD Thermostat. Follow the on screen instructions to set up the system. Once set up, a QR Code will appear.

Step 4 – Initial Setup

'MySTRATA_HEAT' by LATICRETE

Available on the App Store

ANDROID APP ON Google play

Download the MySTRATA_HEAT App.

Open the MySTRATA_HEAT App and scan the QR Code on the STRATA_HEAT Smart LCD Thermostat screen. Follow the instructions in the App to complete setup.

Step 5 – Add Location and Room

The MySTRATA_HEAT App will guide you through the setup of your STRATA_HEAT Smart LCD Thermostat. You will have to set up your house location and then the room within which your new STRATA_HEAT Smart LCD Thermostat is located.

Location
A location needs to be setup before a room can be configured and the STRATA_HEAT Smart LCD Thermostat device registered. Creating a location is user friendly and easy to follow, it is advised to have details of your current energy tariff and pricing to hand, as these will be required if you wish to use the energy monitoring features.

Room Setup
With a location now setup, the next step is to register a room in which your STRATA_HEAT Smart LCD Thermostat is located. This is the heating zone your thermostat will control. Ensure you set the correct System Type and Wattage of heaters connected.

NOTE: If an external relay or contactor relay has been installed please set System Type as Electric + Relay.

Welcome to the STRATA_HEAT™ Smart LCD Thermostat

Heating Indicator
Displays when heating is active

Error Messages
See Troubleshooting Page

Current Floor/Air temperature
Floor will be displayed if floor sensor is installed and switched on

Temporary Override
Use the slider or press the +/− icons to set a temporary override until next heating period

Target Temperature
Temperature you wish the thermostat to achieve

Weather
7−day forecast for your area

Menu

Air/Floor limit
Will only be displayed when in floor mode and an air limit is set.

Getting Started

How to quickly change the temperature
Use the slider or press the +/− icons to change your target temperature.

If in *"Program"* mode this will set a temporary override until your next heating period.

If in *"Manual"* mode this will set a fixed target temperature.

Once the target temperature is set above current floor/air temperature the heating indicator will appear.

How to quickly change mode
Mode select allows you to quickly change from program, manual or vacation modes. You can also switch *"Frost Protection"* on or simply switch the *"Heating Off"* from here. Frost protection will ensure that the floor/air temperature does not drop below 44.0°F (6.5°C).
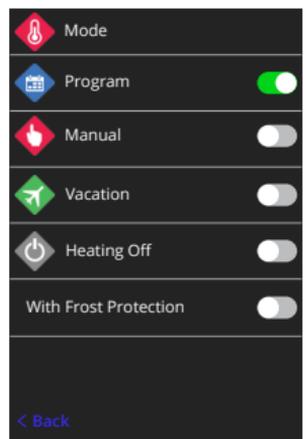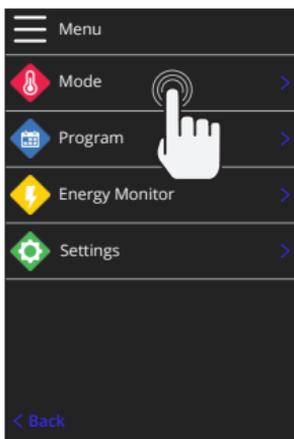
How to set a program

Setting a *"Program"* allows you to set comfort temperatures at set times throughout the day. Days can programmed individually, all days the same or weekdays as a block and weekends as a block. The choice is yours.
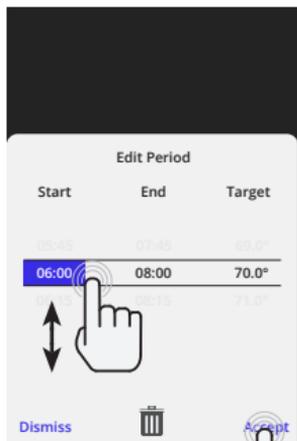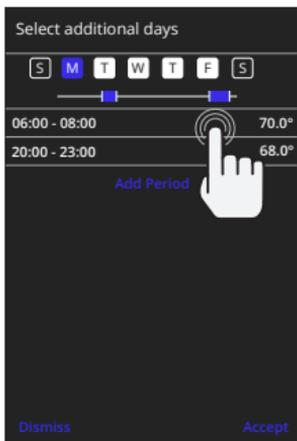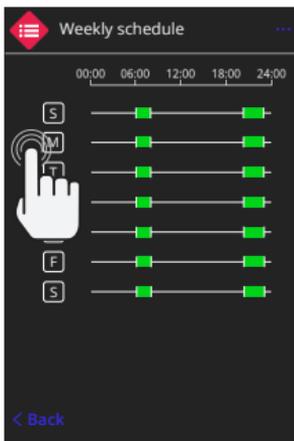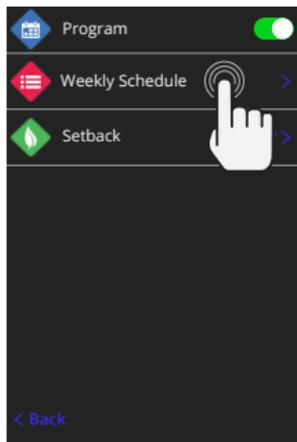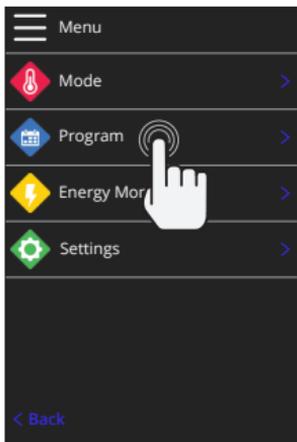
To *"Select additional days"* press the days of the week and the squares will be highlighted in white as shown and will follow the programmed heating schedule.

Once you are happy press *"Accept"* to save the heating schedule. This will return you to the previous screen to repeat as necessary.

NOTE: For tailor–made preset heating schedules for different room types press the three dots "• • •" on the weekly schedule page.

Setback Temperature

The *"Setback"* temperature is a lower energy efficient temperature when outside of a heating period.
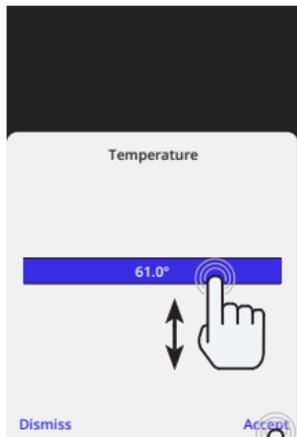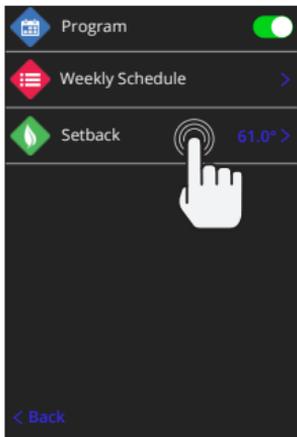
How to set into Manual Mode

Setting into *"Manual"* mode allows you to set a fixed target temperature for the thermostat to achieve. The thermostat will continue to maintain this temperature until another operating mode or temperature is selected.
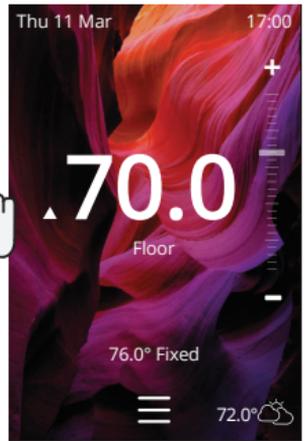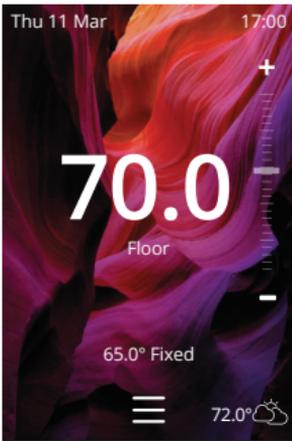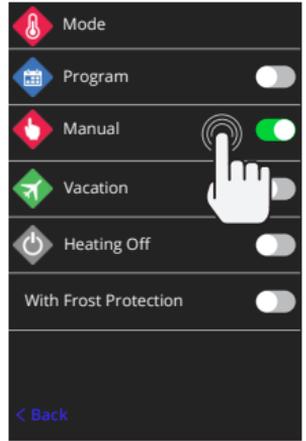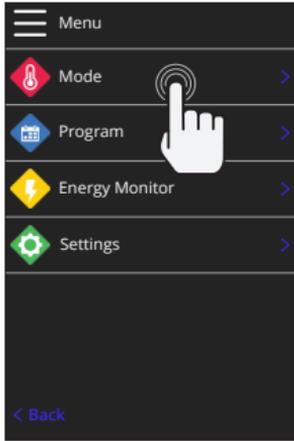
How to set into Vacation Mode

"Vacation Mode" allows you to override regular scheduling with a lower fixed temperature over a set time to save energy and avoid thermostat re–programming.

Thu 11 Mar	17:00

+

70.0
Floor

74.0° until 11:30

65.0° limit | 72.0°

☰ Menu	
🌡 Mode	>
🗓 Program	>
⚡ Energy Monitor	>
⚙ Settings	>

< Back

🌡 Mode	
🗓 Program	⬜
🔥 Manual	🟢
✅ Vacation	🟠
Heating Off	
With Frost Protection	⬜

< Back

Vacation Start

Date	Time
Today	08:45
Thu 2 Jan	09:00
Fri 3	09:15

↑↓

Dismiss | Next >

Vacation End

Date	Time
Wed 9 Jan	08:45
Thu 9 Jan	09:00
Fri	09:15

↑↓

< Back | Next >

Temperature

49.0°

50.0°

↑↓

< Back | Accept
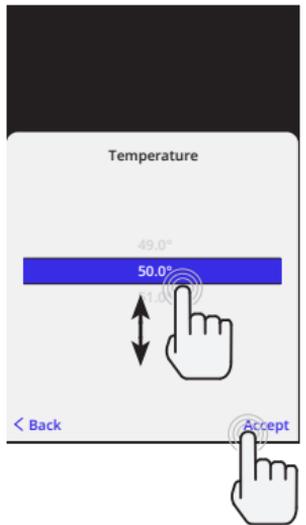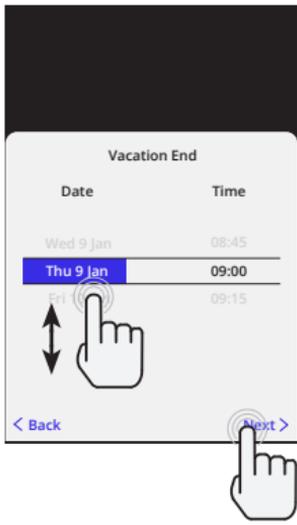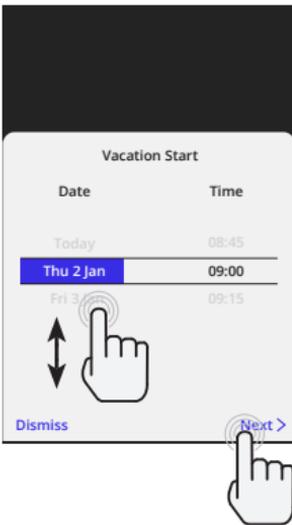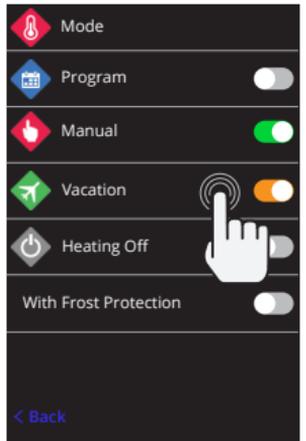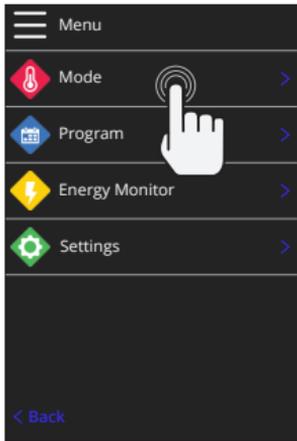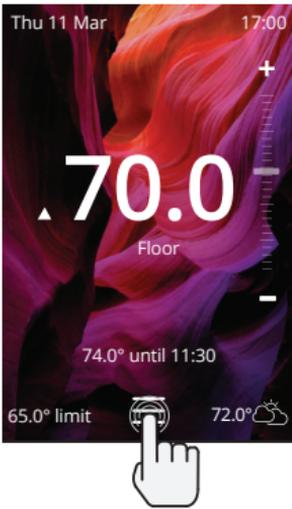
How to switch "Heating Off"

The below will switch the heating off until you cancel it by pressing *"Heating Off"* on the homescreen or going into mode select and pressing the *"Heating Off"* slider.

Thu 11 Mar	17:00

+

70.0
Floor

74.0° until 11:30

65.0° limit | 72.0°

☰ Menu	
🌡 Mode	>
🗓 Program	>
⚡ Energy Monitor	>
⚙ Settings	>

< Back

🌡 Mode	
🗓 Program	⬜
🔥 Manual	🟢
✅ Vacation	⬜
Heating Off	🟢
With Frost Protection	⬜
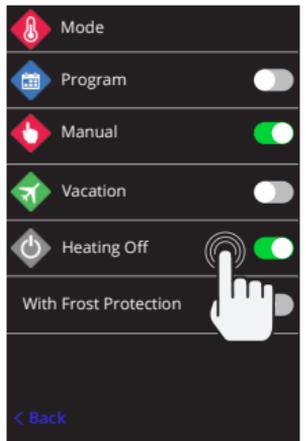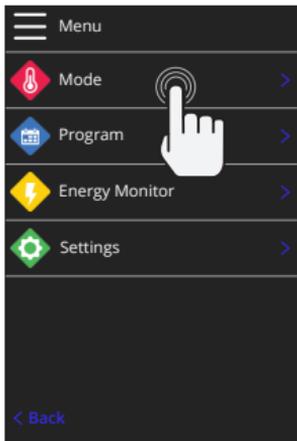
< Back

Energy Monitor

Energy Usage	
Last 24 Hours	1.5kWh
Last 7 Days	0.0kWh
Last 30 Days	0.0kWh
Since reset	0.0kWh

Reset record

< Back

How Energy Monitor works

The STRATA_HEAT™ Smart LCD Thermostat learns how you use your system and how your house reacts to heating and weather. Energy monitoring will show the amount of energy consumed over a certain time period. This will be calculated through system power (total system wattage) multiplied by efficiency and total run time.

You will need to enter the power of your system, and in some cases, the efficiency.

If you do not know these, speak to your installer or system manufacturer.

Power Settings

1,500 W

1	2	3
4	5	6
7	8	9
	0	⌫

Dismiss   Accept

Changing the Power Settings

If you have entered the wrong system power during setup it can be changed in Energy Monitor; Power Settings.

Geo Location Settings
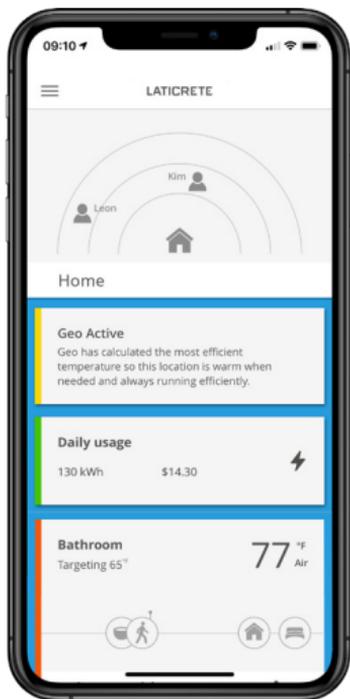
How Geo works

Geo is a unique technology developed by LATICRETE and built into the MySTRATA_HEAT App that uses an advanced algorithm to understand the most efficient heat settings for your home.

Working automatically; it learns your routines and location through background communication with your smartphone and lowers temperatures when you are away, only rising them up to your ideal comfort temperature in time for your arrival home.

Geo will operate when the thermostat is in the program or manual run modes. It is turned off by default. Use the MySTRATA_HEAT App to switch Geo on.

Language Settings	Change the STRATA_HEAT™ Smart LCD Thermostat language	
Time & Date	Change the Time and Date	
	Daylight savings	**On/Off**
	24–hour time	**On/Off**
Heating Preference	Temperature unit	**°C/°F**
	Open window detection	**On/Off**
	The windows open detection feature is designed to switch off heating to save energy when the thermostat detects that a window or door has been opened and, the outside air temperature is significantly below the indoor temperature.	
	Adaptive Learning (Early Start)	**On/Off**
	Adaptive learning will use the historic heating/cooling rates for the time of day, historic external temperatures and the forecast external temperatures, to work out the heating start time in order to reach the comfort time at the start of the comfort period. It will only work in Program Mode.	
Network	Wi-Fi Connection	**On/Off**
	It is possible to set a new Wi-Fi connection from here. The current network connection can also be viewed from this menu, including the signal strength.	
Display	Background	**Light** **Dark** **Random**
	Choose the background image of the STRATA_HEAT™ Smart LCD Thermostat. Random is an image selected from the LATICRETE collection.	
	Standby style	**Temperature** **Time** **Minimalist**
	Choose what will be displayed when the STRATA_HEAT Smart LCD Thermostat goes into standby. Temperature will display current temperature; *Time will display the current time;* *Minimalist will show neither.*	
	Brightness	**Active** **Standby** **Night**
	Adjust the brightness of the STRATA_HEAT™ Smart LCD Thermostat screen when in Active, Standby or Night Mode.	

Display, cont'd	Night period	Set the **Start** and **End** period
	This is the time when you usually go to bed at night and wake up in the morning. The brightness of "Night" mode will begin and end using this time.	
	Screen lock	**On/Off**
	Locks the STRATA_HEAT™ Smart LCD Thermostat screen to prevent any unauthorised changes to the STRATA_HEAT Smart LCD Thermostat. Requires a 4 digit code to access the menu or make changes.	

Advanced Settings

Advanced settings	Sensors & Application	Internal Air Sensor	**Offset** +/− 10°
		Probe 1 Connected	**On/Off**
			Type 5, 10, 15, 100K **Offset** +/− 10°
		The STRATA_HEAT Smart LCD Thermostat uses a 10K sensor. However, if using a STRATA_HEAT Smart LCD Thermostat to replace an existing thermostat you must change to the correct sensor type.	
		Probe 2 Connected	**On/Off**
			Type 5, 10, 15, 100K **Offset** +/− 10°
		Swap Probe Usage	
		The function of Probe 1, Probe 2 from Control/ Limit Sensor can be swapped here.	
		Floor thermostat *(Probe 1 On, Probe 2 Off. See Table 1.0 for alternative thermostat use cases)*	**Control** Floor Remote Air Regulator **Limit** None/Air
		Choose to switch the method of control for the sensor; floor sensor, remote air sensor if not installed underneath the floor or regulator mode.	
		Regulator Mode; Heating is on for X% out of control cycle (default 10 mins). Heating is off for remaining time.	
		Floor type[*]	**Tile/Stone Laminate Carpet Wood Vinyl Other**
		*Choose the floor type of your installation. This will apply different temperature and overheat limits to the STRATA_HEAT Smart LCD Thermostat. * Not applicable if conventional heating system was selected.*	

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Advanced Settings

Advanced settings, cont'd	Temperature limits	Set **Min./Max.** settable temperature limits
	Overheat limit	Set **Overheat air** limit if floor sensor has been installed
	Control Period	Set between **10 – 60 mins.**
	Control period checks the difference in the current measured temperature and the set temperature in a proportional integral algorithm to maintain a steady temperature.	
	About	Details about the STRATA_HEAT™ Smart LCD Thermostat's current firmware, MAC address and Wi-Fi connection information.

Troubleshooting

Display is blank	Brightness	1. Check that the standby brightness is not set to Off.
	Power	2. **(Electrician Required)** Electrician required to verify power is going to the STRATA_HEAT Smart LCD Thermostat and that it is correctly wired.
ER1/ER2	Sensor Error	**(Electrician Required)** Electrician required to verify that the floor sensor has been wired correctly. If it is correctly wired the electrician will need to check the resistance of the floor sensor using a multi meter. For temperatures between 68°F – 86°F (20°C – 30°C) the resistance of the floor sensor should measure between 8K ohms and 12K ohms. If the electrician finds a fault, and the STRATA_HEAT Smart LCD Thermostat is in the room to be heated then it can be set into "Air Mode". To set into "Air Mode", go to Sensors & Application in Advanced Settings and switch the probe off.
Heating is coming on earlier than programmed times	Adaptive learning (Early Start) On	Adaptive learning will use the historic heating/cooling rates for the time of day, historic external temperatures and the forecast external temperatures, to work out the heating start time in order to reach the comfort time at the start of the comfort period. It will only work in Program Mode.
Cannot to set above a certain temperature	Floor Type Temperature Limits	Delicate floor coverings need to have their temperatures limited. If the finished floor is set for wood, laminate, vinyl etc. you are unable to set the temperature above 81°F (27°C).
Wi-Fi Error Symbol	Wi-Fi not setup	If you have not done so, download the MySTRATA_HEAT App, go to Settings and Network setup and follow the on screen instructions to connect to a Wi-Fi Network.
	Wi-Fi disconnected	Follow the step above to try and to re–connect to the Wi-Fi Network. If the STRATA_HEAT Smart LCD Thermostat still fails to connect, see Wi-Fi Troubleshooting.
Clock Sync Icon	Time and Date not set	Connect the STRATA_HEAT Smart LCD Thermostat to a Wi-Fi network or alternatively set the time and date from the settings menu.

Wi-Fi Troubleshooting

Before following the troubleshooting guide below please check the following:

1. The password is WPA2 protected.
2. The router is set to a 2.4 GHz band. (802.11 b, g, n, b/g mixed, b/g/n mixed)

NOTE: If you need to change any of the items listed above, please refer to your router manual.

```
┌─────────────────────────────┐
│ STRATA_HEAT™ Smart LCD      │
│ Thermostat won't connect/   │
│ lost connection to Wi-Fi    │
│ Network                     │
└─────────────────────────────┘
              │
              ▼
┌─────────────────────────────┐      YES   ┌──────────────────┐
│ Possible connection timeout.│ ─────────► │ Device should now│
│ In the MySTRATA_HEAT App try│            │ work as normal   │
│ to connect to the Wi-Fi     │            └──────────────────┘
│ Network again. Does the     │
│ STRATA_HEAT Smart LCD       │
│ Thermostat connect?         │
└─────────────────────────────┘
              │ NO
              ▼
┌──────────────────┐   YES   ┌─────────────────────────────┐
│ Device should now│ ◄────── │ If you reboot/restart the   │
│ work as normal   │         │ router does the STRATA_HEAT │
└──────────────────┘         │ Smart LCD Thermostat connect│
                             │ to the Wi-Fi network?       │
                             └─────────────────────────────┘
                                        │ NO
                                        ▼
┌──────────────────┐   NO   ┌─────────────────────────────┐
│ Update router    │ ◄───── │ Is the router updated to    │
│ firmware         │        │ the latest firmware?        │
└──────────────────┘        └─────────────────────────────┘
                                        │ YES
                                        ▼
┌─────────────────────────────┐   YES   ┌──────────────────┐
│ Remove the display of the   │ ──────► │ Device should now│
│ STRATA_HEAT Smart LCD       │         │ work as normal   │
│ Thermostat and after 10–15  │         └──────────────────┘
│ seconds reattach. Does the  │
│ STRATA_HEAT Smart LCD       │
│ Thermostat connect to your  │
│ Wi-Fi Network?              │
└─────────────────────────────┘
              │ NO
              ▼
┌─────────────────────────────┐   NO   ┌──────────────────┐
│ Set up a mobile hotspot     │ ─────► │ Contact LATICRETE│
│ using a smartphone. On a    │        │ with your router │
│ separate device login to    │        │ make and model   │
│ the MySTRATA_HEAT app. Try  │        └──────────────────┘
│ to connect the STRATA_HEAT  │
│ Smart LCD Thermostat to this│
│ mobile hotspot.             │
│                             │
│ Does the STRATA_HEAT Smart  │
│ LCD Thermostat connect?     │
└─────────────────────────────┘
              │ YES
              ▼
┌─────────────────────────────┐
│ If the STRATA_HEAT Smart LCD│
│ Thermostat connected to a   │
│ mobile hotspot then distance│
│ from the STRATA_HEAT Smart  │
│ LCD Thermostat to your      │
│ router is the likely issue, │
│ or the signal could be      │
│ blocked. A Wi-Fi repeater/  │
│ extender may be required.   │
└─────────────────────────────┘
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Technical Specifications

Model	0804-0404-TW/TB
Voltage	110V – 240V AC +/–15% 50Hz/60Hz
Protection	II ▢
Max. Load	15A resistive (120 V/1800W, 240 V/3600W)
GFCI	Class A GFCI with 5mA trip level
Rated impulse voltage	4000V
Automatic action	100,000
Disconnection means	1B
Pollution degree	2
Max. Ambient Temperature	40°C / 104°F (T40)
Relative Humidity	80%
IP Rating	IP30
Sensors	Floor/Air
Sensor Type	NTC10K @ 25°C
Operating Frequency	2401 – 2484MHz
Max. Radio–Frequency Power Transmitted	20dBm
Compatibility	Electric Underfloor Heating
Standards	UL–60730–1 UL–60730–2–9 UL–943 CAN/CSA–E60730–1 CAN/CSA–E60730–2–9 CAN/CSA–C22.2 No. 144.1 FCC 47 CFR Part 15, ICES–003
Warranty	1 year
Approvals	ETL Intertek

Warranty

LATICRETE warrants this product, to be free from defects in the workmanship or materials, under normal use and service, for 1 year from the date of purchase by the consumer.

If at any time during the warranty period the product is determined to be defective, LATICRETE shall repair or replace it, at LATICRETE's option.
If the product is defective, please either;

Return it, with a bill of sale or other dated proof of purchase, to the place from which you purchased it, or Contact LATICRETE. LATICRETE will determine whether the product should be returned or replaced.

The 1 year warranty only applies if the product is registered with LATICRETE within 30 days after purchase. Registration can be completed online at www.laticrete.com

This warranty does not cover removal or re-installation costs and shall not apply if it is shown by LATICRETE that the defect or malfunction was caused by failure to follow the instruction manuals, incorrect installation or damage which occurred while the product was in the possession of a consumer. The sole responsibility of LATICRETE shall be to repair or replace the product within the terms stated above. This warranty does not extend to any associated software such as apps or portals.

LATICRETE SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE OF ANY KIND, INCLUDING ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING, DIRECTLY OR INDIRECTLY, FROM ANY BREACH OF ANY WARRANTY, EXPRESS OR IMPLIED, OR ANY OTHER FAILURE OF THIS PRODUCT. THIS WARRANTY IS THE ONLY EXPRESS WARRANTY LATICRETE MAKES ON THIS PRODUCT. THE DURATION OF ANY IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IS HEREBY LIMITED TO THE ONE-YEAR DURATION OF THIS WARRANTY.

This Warranty does not affect your statutory rights.

1 YEAR
Warranty