OJ ELECTRONICS UTN5 OJ Microline Non Programmable Thermostat User Manual

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OJ ELECTRONICS UTN5 OJ Microline Non-Programmable Thermostat

Specifications

- Brand: OJ Electronics
- Model Number: 670084
- Date: 06/24 (KJE)
- Website: www.ojelectronics.com

Product Usage Instructions

Introduction

- Startup wizard: The guided startup makes it easy to install and set up the thermostat with the correct settings in a matter of minutes. A startup wizard takes you through a four-step processquickly. Once installed, this simple thermostat requires no subsequent support.
- Quick adjustments: Simply tap the capacitive touch buttons on the thermostat gently with your fingertip if you want to make quick temperature adjustments or turn off the display on the thermostat.Settings are easily changed in the intuitive menu with scrolling text that provides helpful explanations.

Description of Buttons and Functions

Touch Areas:

- 1 Information area: Show support information by long pressing both button 1 and button 4 simultaneously for 3 seconds.
- 2 Adjust and navigate down
- 3 Adjust and navigate up
- 4 Select and accept

Buttons:

- 5 GFCI test button
- 6 Multifunctional button

Indicators:

- 7 Menu navigation
- 8 Heating: The LED lights up orange during heating.

Start-up Wizard
When the thermostat has been installed and turned on for the first time, or after you have performed a factory reset, the thermostat will run a start-up wizard. The wizard guides you through a basic setup process to ensure that you have the right settings, and a thermostat test is performed. The start-up wizard gives you the option to adjust four settings, followed by the GFCI test. The dots in the left column show the setting number to help you navigate your way through the guide.

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INTRODUCTION

Congratulations on the purchase of your new UTN5® LED touch thermostat. We hope that you will enjoy the sleek design, the easily readable temperature, and the user-friendly touch interface.

Startup wizard
The guided startup makes it easy to install and set up the thermostat with the correct settings in a matter of minutes. A startup wizard takes you through a four-step process in no time. Once installed, this simple thermostat requires no subsequent support.

Quick adjustments
Simply tap the capacitive touch buttons on the thermostat gently with your fingertip if you want to make quick temperature adjustments or turn off the display on the thermostat. Settings are easily changed in the intuitive menu with scrolling text that provides helpful explanations.

Protect your floor
The UTN5 thermostat is suitable for tile, stone, laminate, and wooden floors. Choose between 4 different application modes:

- Floor temperature with floor protection
- Room temperature with floor protection
- Room temperature without floor protection
- Sensorless mode

Other features

- Adjust light brightness or turn off screen completely
- Show temperature in either Fahrenheit or Celsius
- Frost protection
- Limit setpoint range
- Standby button on the side for simple and direct operation

Sensorless mode
The UTN5 thermostat can control heat levels even if no sensor is available – ideal if, for example, your floor sensor is broken. This mode is also known as “Regulator mode”. Enjoy!

DESCRIPTION OF BUTTONS AND FUNCTIONS

Touch areas

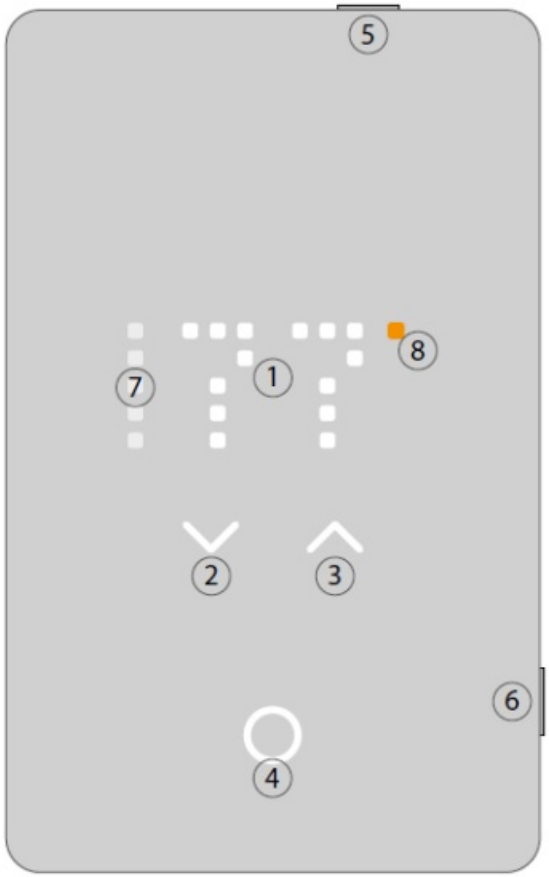
1. Information area

   Show support information by long pressing both button 1 and button 4 simultaneously for 3 seconds.
2. Adjust and navigate down
3. Adjust and navigate up
4. Select and accept

   When the screensaver is active, press to wake up display

   Buttons
5. GFCI test button
6. Multifunctional button:
   - Press once to go into standby mode or turn on the thermostat.
   - When the display is ON, hold for 15 seconds to perform a factory reset.
   - Reset/confirm GFCI test mode.

     Indicators
7. Menu navigation
8. Heating: The LED lights up orange during heating.



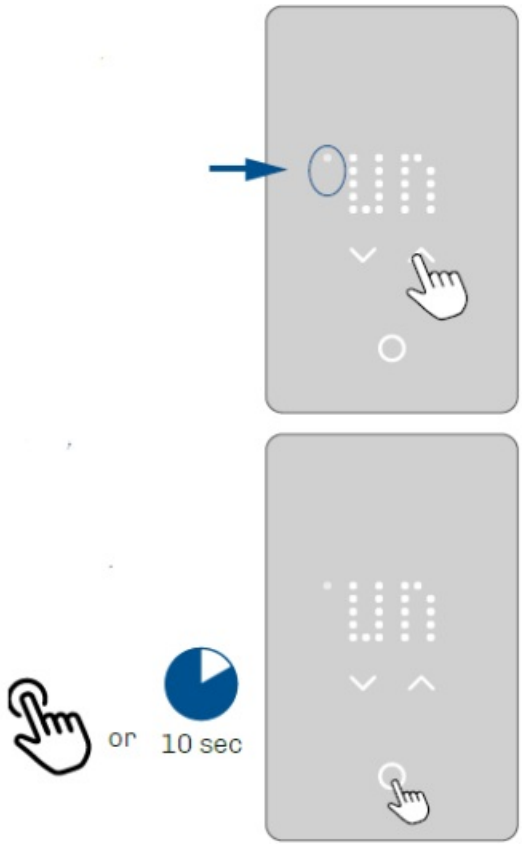
START-UP WIZARD

- When the thermostat has been installed and turned on for the first time, or after you have performed a factory reset, the thermostat will run a start-up wizard. The wizard guides you through a basic setup process to ensure that you have the right settings and a thermostat test is performed.
- The start-up wizard gives you the option to adjust four settings, followed by the GFCI test.
- The dots in the left column show the setting number to help you navigate your way through the guide.

The start-up wizard takes you through the following steps:

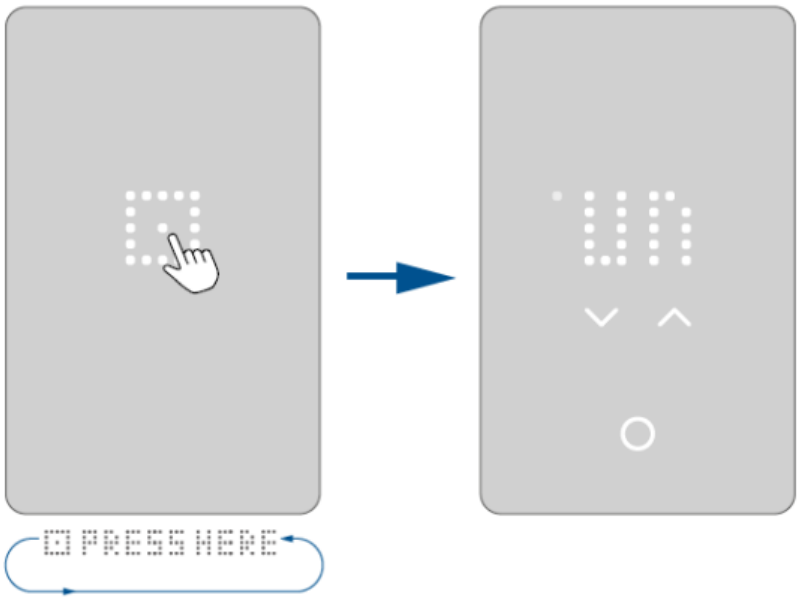
1. Unit
2. Sensor application
3. Floor protection
4. GFCI Test

After the last setting, you will be instructed to perform a GFCI Test. Once the test has been passed, the thermostat is ready to use. To see a description of the setting, you can tap the text or wait 10 seconds. The full setting name and its number will scroll across the screen from the right.Touch text again to cancel the text scrolling. If the default settings are fine you can proceed to the GFCI test step immediately to complete the initial setup.

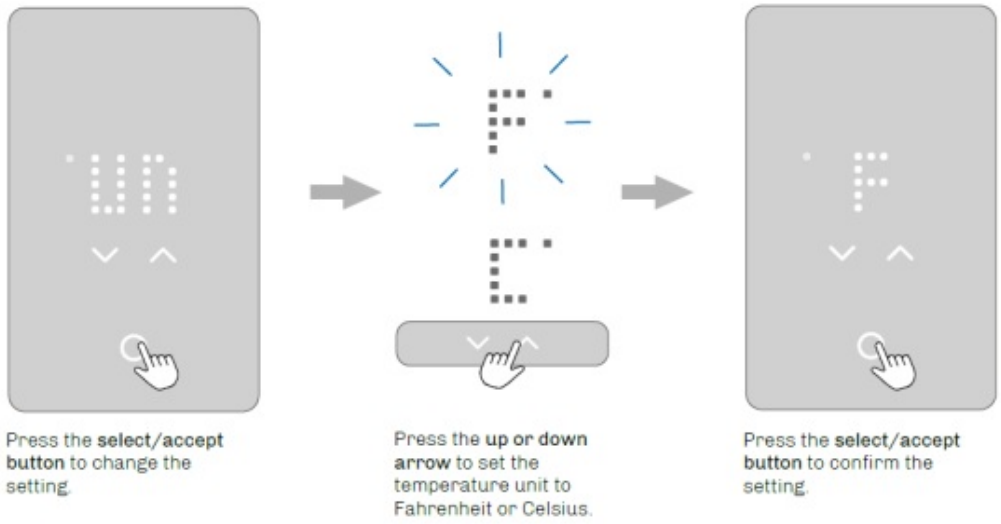


START-UP WIZARD

POWER-UP
During power-up, a pulsating select/accept button will appear, followed by the text “PRESS HERE.” Pressing this area will initiate the start-up wizard.



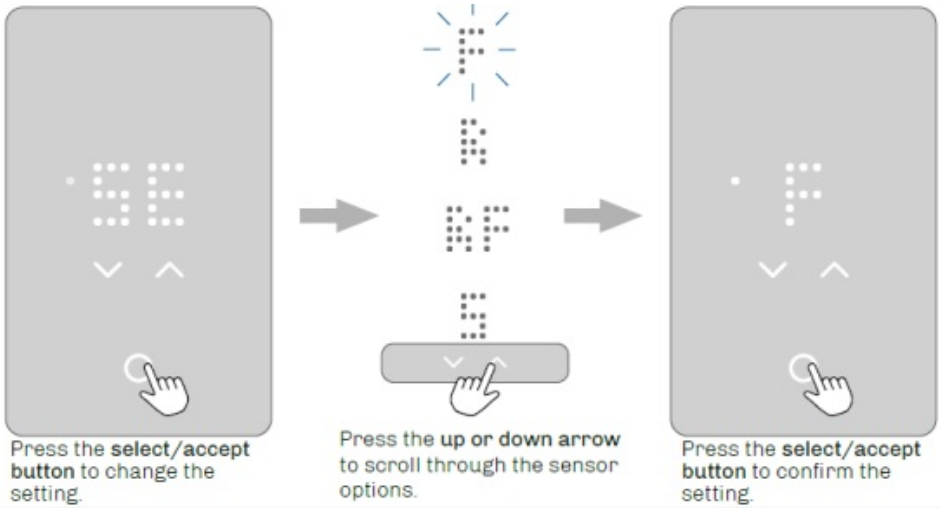
STEP 1 – UNIT
The first step is the Unit setting. (Unit – °F)
In the Unit setting, the temperature unit can be set to F (Fahrenheit) or C (Celsius). Fahrenheit is set as default.



STEP 2 – SENSOR APPLICATION

- The second setting option (SENSOR – FLOOR) is the sensor application.
- In this setting, you can choose between R (room sensor), F (floor sensor), or RF (room sensor with floor limit).
- Once the sensor application has been chosen and the start-up wizard has been completed, you will only be able to change the sensor application via the app or by performing a factory reset.
- Floor: With this setting, the floor sensor controls the heating system.
- This is set as the default. Room/Floor Protection: With this setting, the room sensor built into the thermostat controls the heating system, while the floor sensor limits the heating according to the set floor protection limits.
- Room: With this setting, the room sensor built into the thermostat controls the heating system.
- Sensorless: With this setting, the thermostat can be set to a fixed heating percentage without the use of any temperature sensor.

NOTE! The floor protection will be disabled.



SENSORLESS MODE (REGULATOR MODE)
Sensorless mode is a regulation mode in the thermostat which allows you to select a heating percentage without use of any temperature sensor (aka ‘regulator mode’). This mode of operation is selectable only during the initial setup wizard.

Why use the sensorless mode?

Sometimes, neither floor mode nor room mode is suitable for regulating the amount of heat in the floor. For example:

- If there is a problem with the temperature sensor in the floor resulting in an error (E1/E2/E3)
- When environmental factors affect the temperature of the floor or the room in unexpected or random ways (e.g. drafts or other heat sources)
- When the thermostat cannot be mounted inside a room where floor temperature control is not possible.

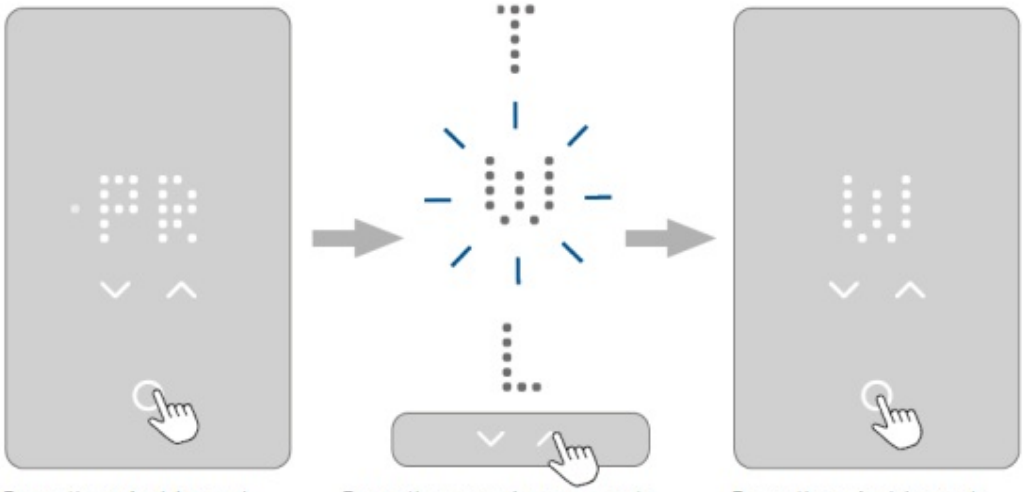
How does it work?

- The thermostat is set to a fixed heating percentage of the cycle time (PWM duty cycle) – i. e. if the thermostat says 75, it is set to heat 75% of the cycle time. It is recommended to have a setting of 20-25% as a starting point.
- When Sensorless mode is activated, the heating indicator will be off. It will only light up in case the thermostat has activated heating.
- When the sensorless mode is activated, the screen will show the number in percent instead of the actual temperature.
- When the sensorless mode is selected, there will be no floor overheat protection enabledThe internalal overheat protection of the thermostat itself remains active in sensorless mode.

STEP 3 – FLOOR PROTECTION
The third setting option (PROTECTION) is the Floor Protection setting.

Set the floor protection according to the floor type:

- W (wood), L (laminate), T (tiles), or OFF. Wood is the default setting.
- Once the floor type has been selected and the start-up wizard has been completed, you will only be able to change the floor type by performing a factory reset.



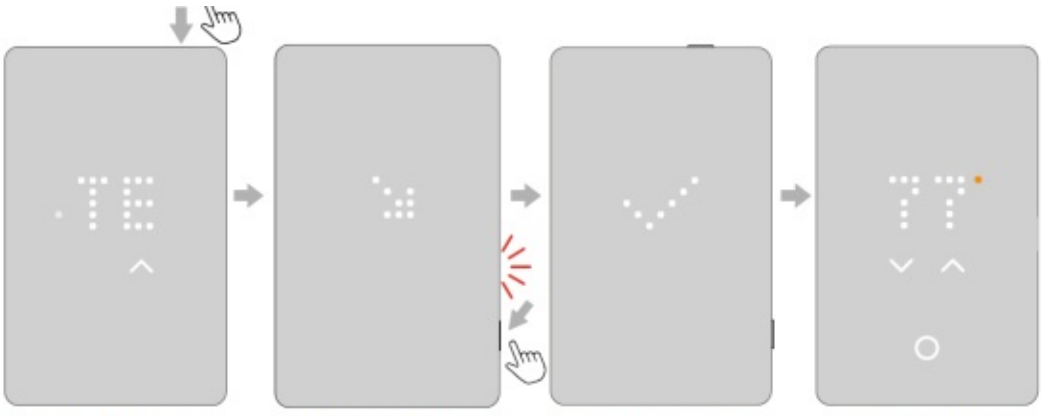
Press the **select/accept button** to change the setting.

Press the **up or down arrow** to scroll through the protection options.

Press the **select/accept button** to confirm the setting.

STEP 4 – GFCI TEST

The last step in the start-up wizard is the GFCI test.



Push the **top button** to test the GFCI relay.

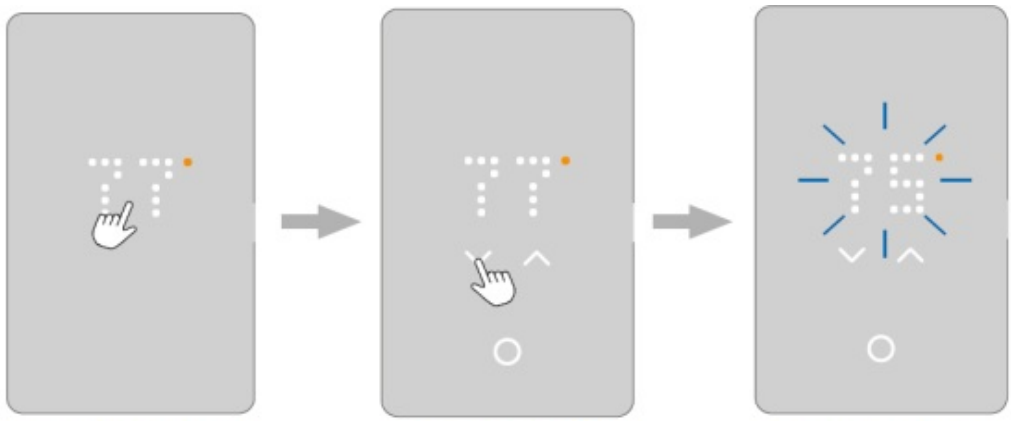
A red light on the right-hand side will flash and the text ↘GFCI TRIPPED PRESS TO RESET will scroll across the screen.
Press the **side button** for a moment to reset.

A check mark will appear to show that the GFCI has been reset and is working correctly.

The thermostat will then be ready for use.

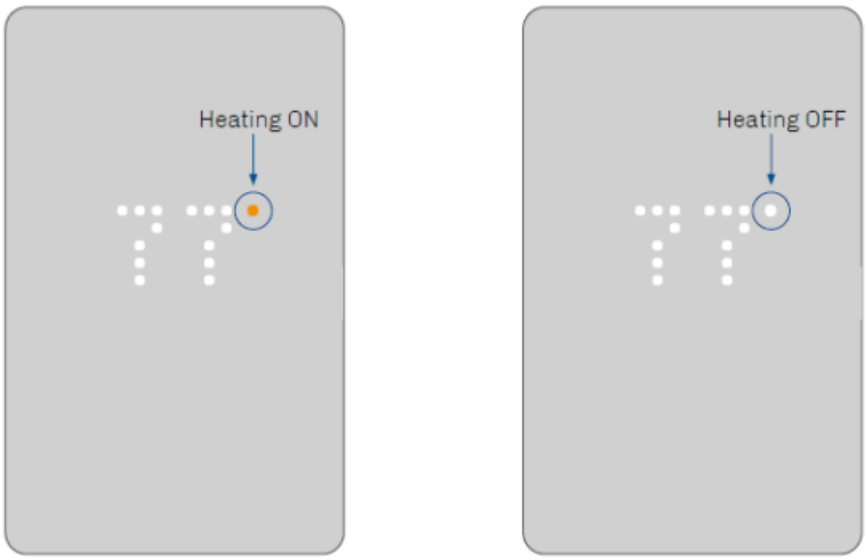
HOW TO CHANGE THE TEMPERATURE

To learn about how to set upper and lower temperature limits, go to the section on “Floor limits”.



HEATING STATUS

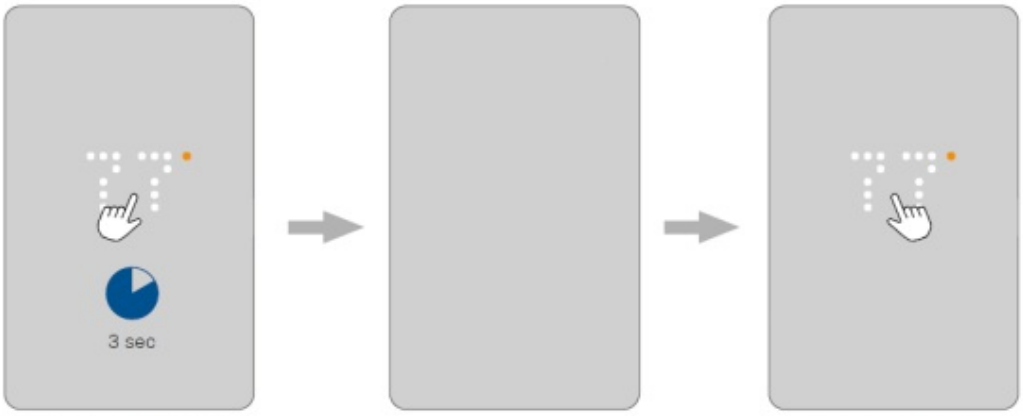
- When the heating is on, the white degree indicator will turn orange.
- This is visible in the screensaver, on the home screen, and when adjusting the temperature.
- The orange dot is also visible on the standby screen when frost protection is enabled and active. To find out more about frost protection, go to the section on standby and frost protection.



HOW TO TURN OFF THE DISPLAY

In the screensaver mode, the display can be turned off completely.

PLEASE NOTE: This can only be done in the screensaver mode.

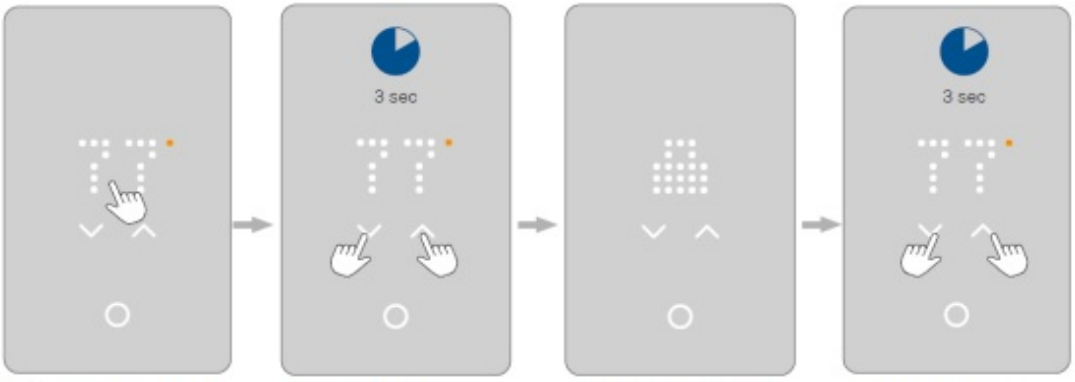


In the screen saver mode, press the **temperature** area for three seconds and the screen will turn off.

Touch the **screen** to turn on the display in the screen saver.

HOW TO LOCK THE SCREEN

The screen lock prevents children or others from tampering with the thermostat temperature or the settings.



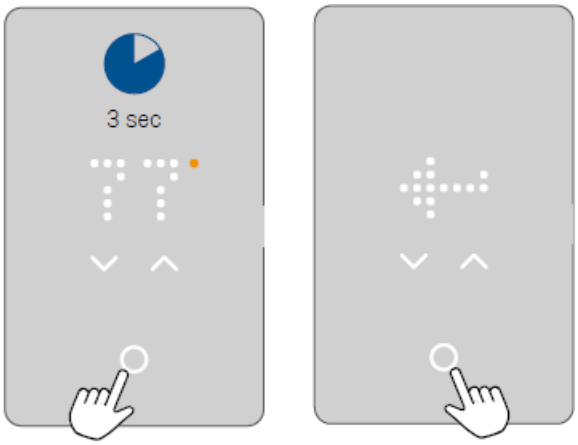
In the screen saver mode, touch the **temperature area** to wake up the thermostat. The home screen will appear.

Press both **arrows** simultaneously for three seconds to lock the screen.

The screen will show a lock icon and return to screen saver mode.

Repeat this process to unlock the screen.

HOW TO ENTER THE SETTINGS MENU



To activate the settings menu:

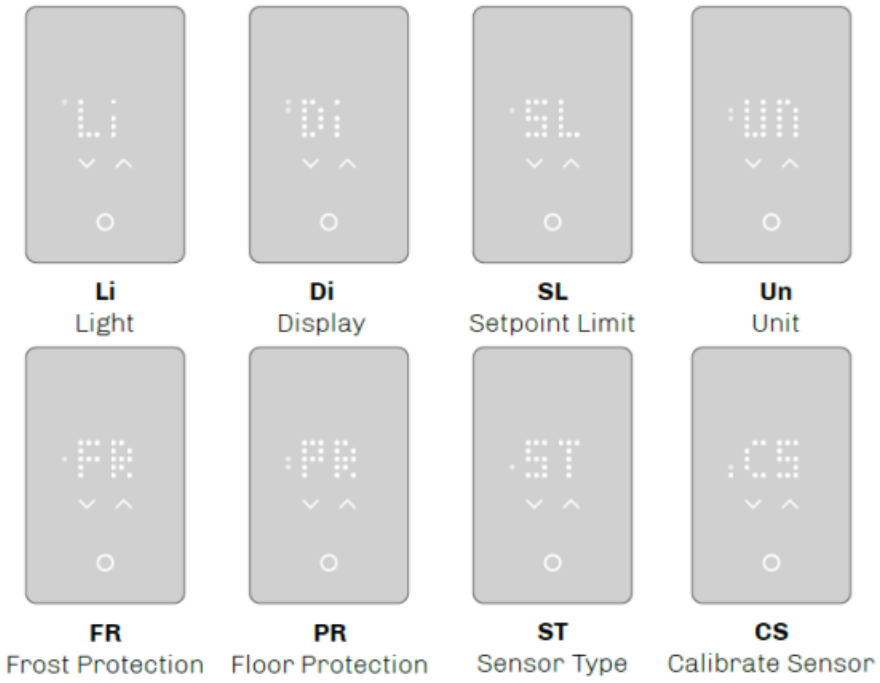
1. Touch any touch area to wake up the thermostat.
2. Touch the select/accept button for 3 seconds to enter the setup menu.

To exit the settings menu:

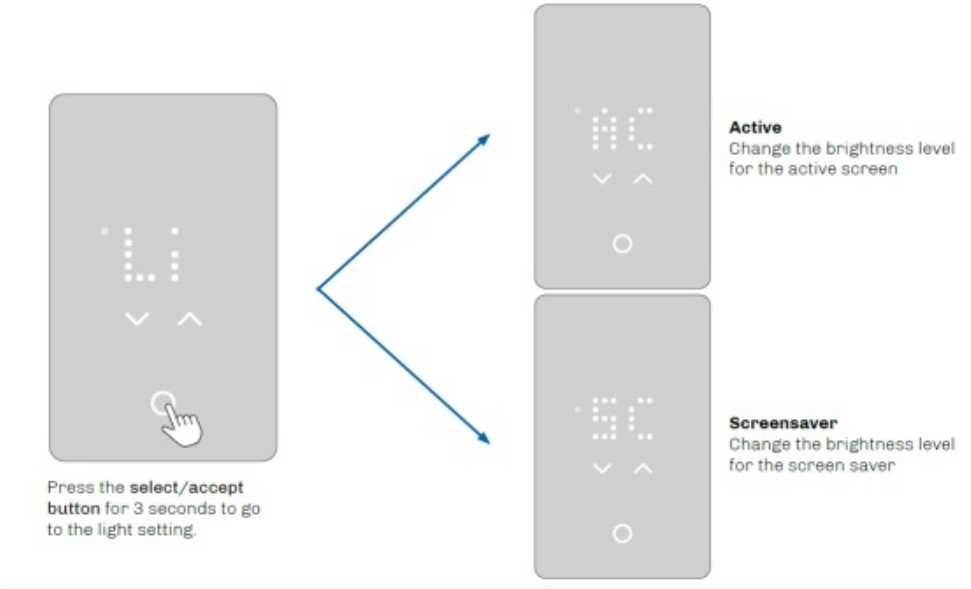
1. After 30 seconds, the screensaver will activate. This exits the menu.OR:
2. Use the up or down arrow buttons to navigate to the exit icon and press the select/accept button.

In the settings menu, you have 8 options.

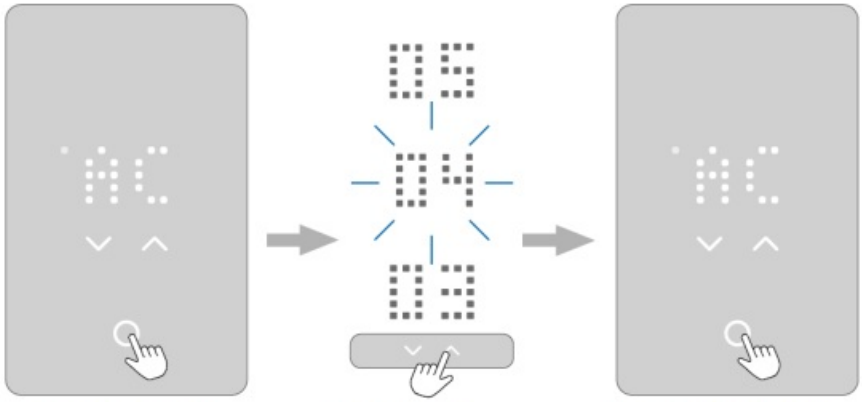
- The dots in the left column indicate the setting number.
- If you are not sure what the text on the screen means, you can touch the menu abbreviations and explanatory text will scroll across the screen. This can be interrupted by pressing the scrolling text once.



LIGHT
In the Light setting, you can set the brightness level for the screensaver and the active screen.



HOW TO CHANGE THE BRIGHTNESS – FOR THE ACTIVE SCREEN
In the Active Screen light setting, you can set the brightness level from 1 to 6 when the screen is active.



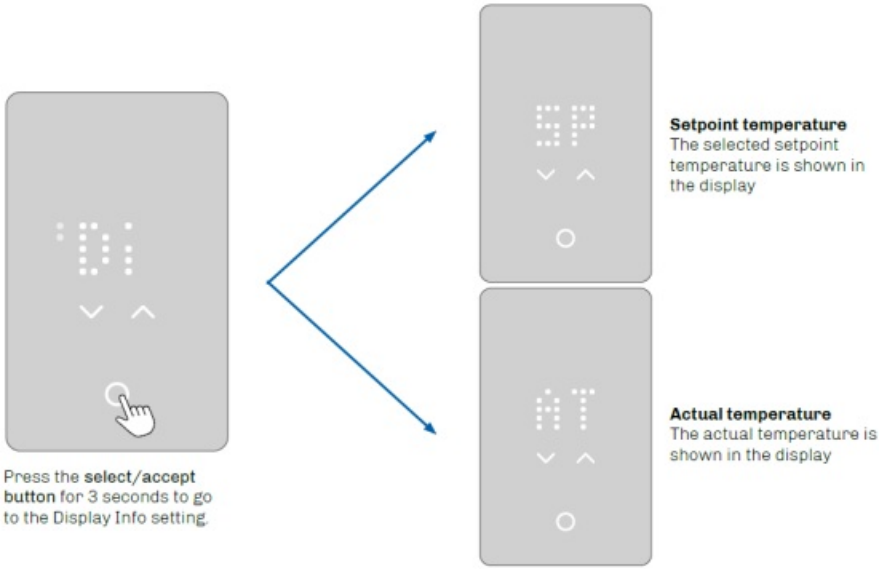
Press the **select/accept button** for 3 seconds to go to the Active Screen light setting.

Press the **up or down arrow** to adjust the setting.

Press the **select/accept button** to confirm. The screen will return to the light setting options.

DISPLAY INFO

In the Display Settings, you can choose whether to show setpoint temperature or actual temperature in the display



Press the **select/accept button** for 3 seconds to go to the Display Info setting.

Setpoint temperature
The selected setpoint temperature is shown in the display

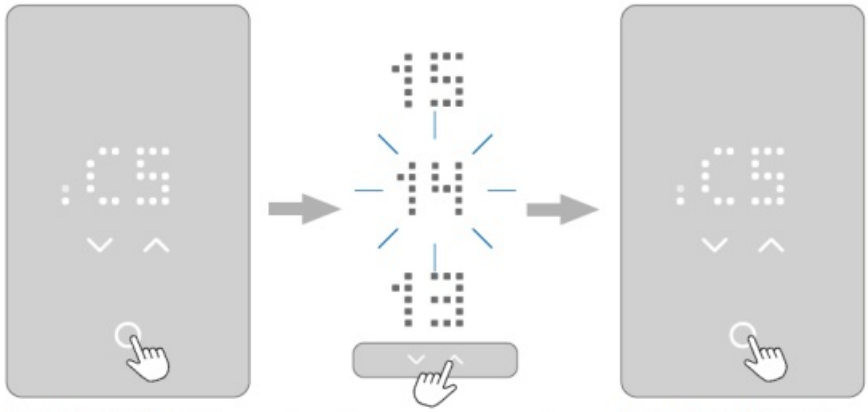
Actual temperature
The actual temperature is shown in the display

TEMPERATURE SETPOINT LIMITS

Temperature limits (setpoint range)*:

This limits the setpoint that the user can set on the thermostat. (Scale limit) To learn about floor overheat protection, please refer to the section on “Floor Protection Limits.”

	Min.	Max.
°C	5–25°C	10–40°C
°F	41–77°F	50–104°F



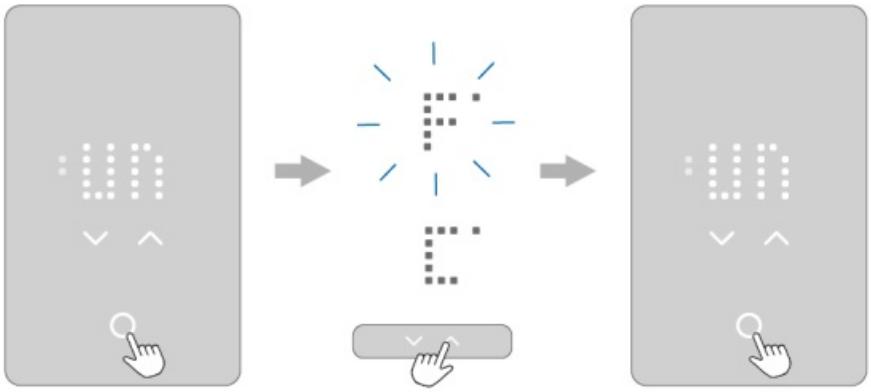
Press the **select/accept button** for 3 seconds to go to the Calibrate Sensor setting.

Press the **up or down arrow** to select the correct messured temperature.

Press the **select/accept button** to confirm. The screen will return to the setting options.

HOW TO CHANGE THE TEMPERATURE UNIT

In the Unit Setting, the temperature unit can be set to F (Fahrenheit) or C (Celsius).



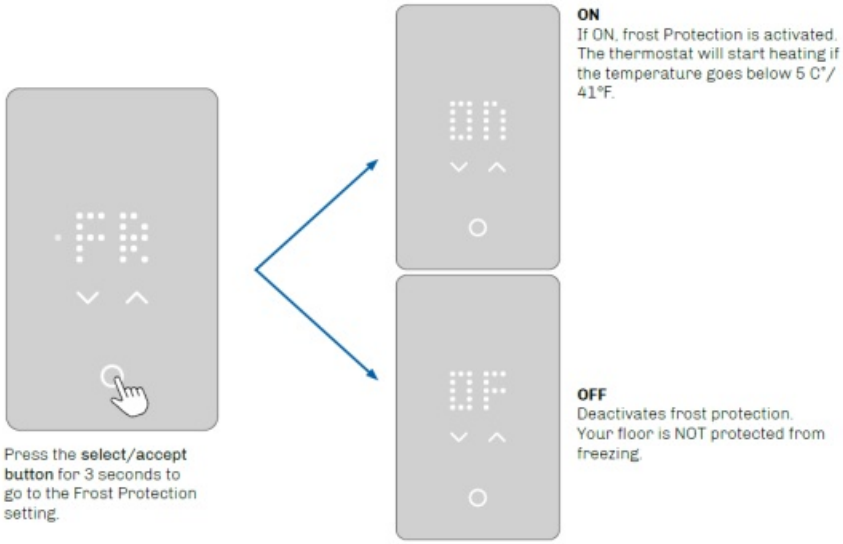
Press the **select/accept button** for 3 seconds to go to the Unit setting.

Press the **up or down arrow** to set the temperature unit to Fahrenheit or Celsius.

Press the **select/accept button** to confirm the setting.

FROST PROTECTION

In the Frost Protection Setting, you can turn frost protection ON and OFF.



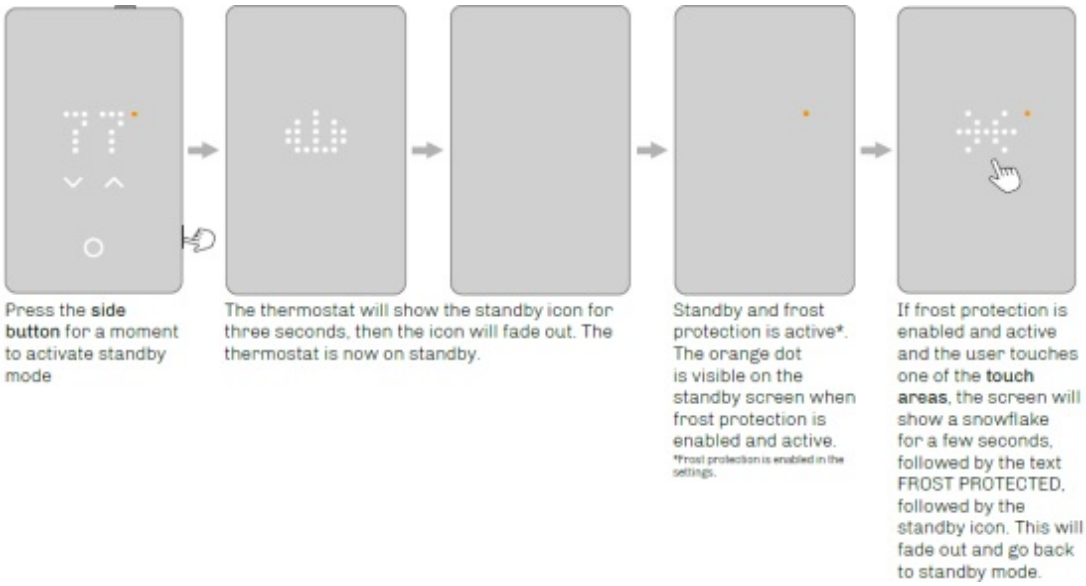
Press the **select/accept button** for 3 seconds to go to the Frost Protection setting.

ON
If ON, frost Protection is activated. The thermostat will start heating if the temperature goes below 5 C°/ 41°F.

OFF
Deactivates frost protection. Your floor is NOT protected from freezing.

STANDBY AND FROST PROTECTION

You have the option of setting the thermostat in standby mode so that only frost protection is activated if enabled. All other functions in the thermostat are switched off. Frost protection means that the thermostat activates the heating when the sensor measures a temperature below the frost protection limit.



Press the **side button** for a moment to activate standby mode

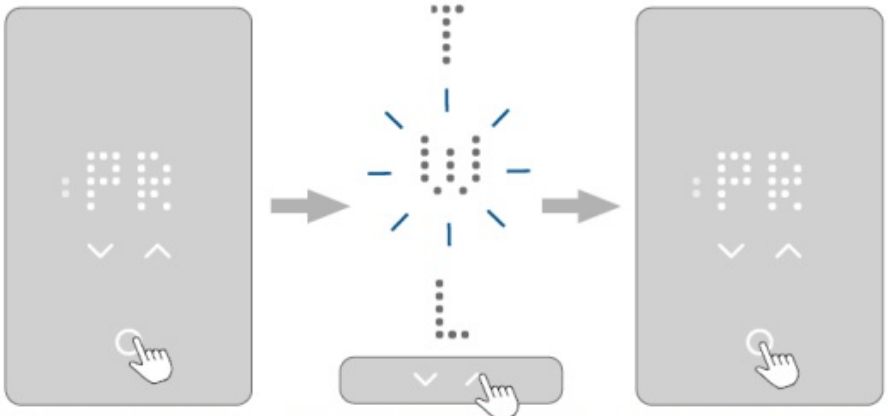
The thermostat will show the standby icon for three seconds, then the icon will fade out. The thermostat is now on standby.

Standby and frost protection is active*. The orange dot is visible on the standby screen when frost protection is enabled and active.
*Frost protection is enabled in the settings.

If frost protection is enabled and active and the user touches one of the **touch areas**, the screen will show a snowflake for a few seconds, followed by the text FROST PROTECTED, followed by the standby icon. This will fade out and go back to standby mode.

FLOOR PROTECTION LIMITS

Floor protection limits:
This type of limit will override the heating/regulation if the floor temperature measured by the sensor exceeds the thresholds set. If the temperature falls below the minimum threshold, the heating is switched on. If it rises above the maximum threshold, the heating is switched off. This limit feature is only active in the “Floor” and “Room with floor limits” modes.



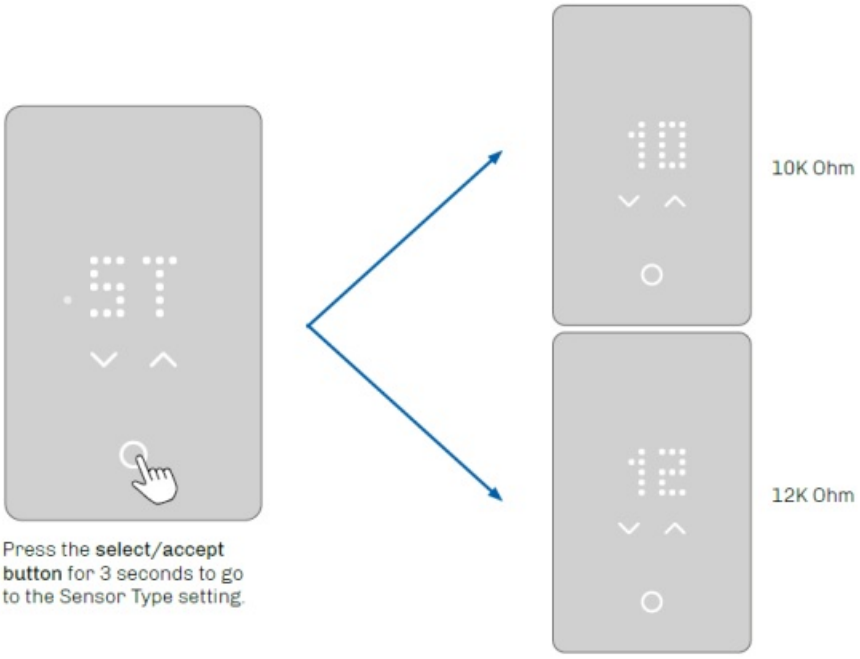
Press the **select/accept button** for 3 seconds to go to the Floor Protection Setting.

Press the **up or down arrow** to scroll through the protection options.

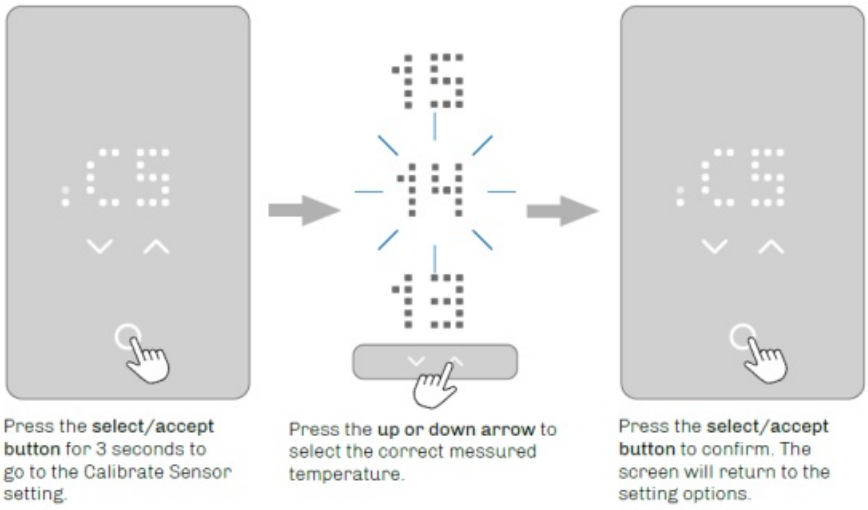
Press the **select/accept button** to confirm the setting.

Floor protection limits	°C		°F	
	Min.	Max.	Min.	Max.
– OFF (floor protection is disabled)	–	–	–	–
– Wood (default)	5°C	27°C	41- °F	80- °F
– Laminate	5°C	28°C	41- °F	82- °F
– Tiles	5°C	40°C	41- °F	104- °F

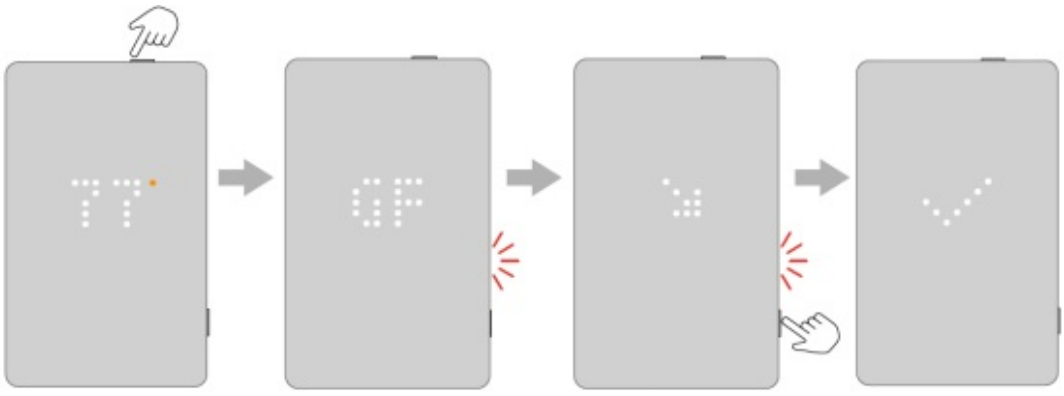
FLOOR SENSOR TYPE
Here, you can select the sensor type. You can choose between 10K Ohm or 12K Ohm



SENSOR CALIBRATION
If the actual measured temperature does not match the temperature displayed on the thermostat, you can adjust the thermostat in this setting by increasing or decreasing the number to match the measured temperature.
A factory reset will also reset changes made to the sensor calibration setting.



GFCI TEST
The GFCI thermostat has a built-in GFCI that ensures personal safety in the event of ground faults. The GFCI must be tested monthly. Installation and use must follow national and local regulations.



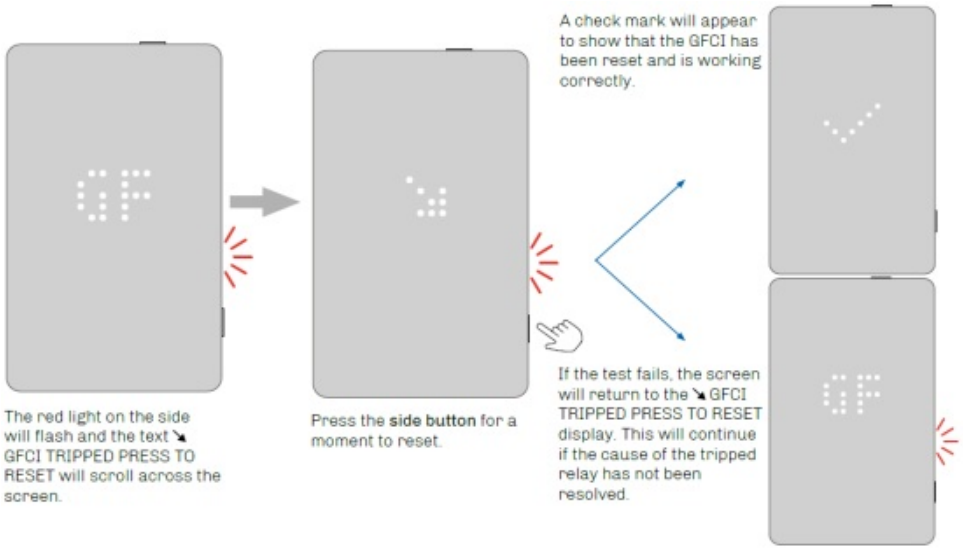
Press the **top button** to test the GFCI relay.

The red light on the side will flash and the text ↘ GFCI TRIPPED PRESS TO RESET will scroll across the screen. Press the **side button** for a moment to reset.

A check mark will appear to show that the GFCI has been reset and is working correctly.
Normal operation then continues.

GFCI ERROR – RELAY TRIPPED

When the GFCI relay has been triggered due to an electrical fault, the red light on the side will flash and the text GFCI TRIPPED PRESS TO RESET will scroll across the screen.



The red light on the side will flash and the text ↘ GFCI TRIPPED PRESS TO RESET will scroll across the screen.

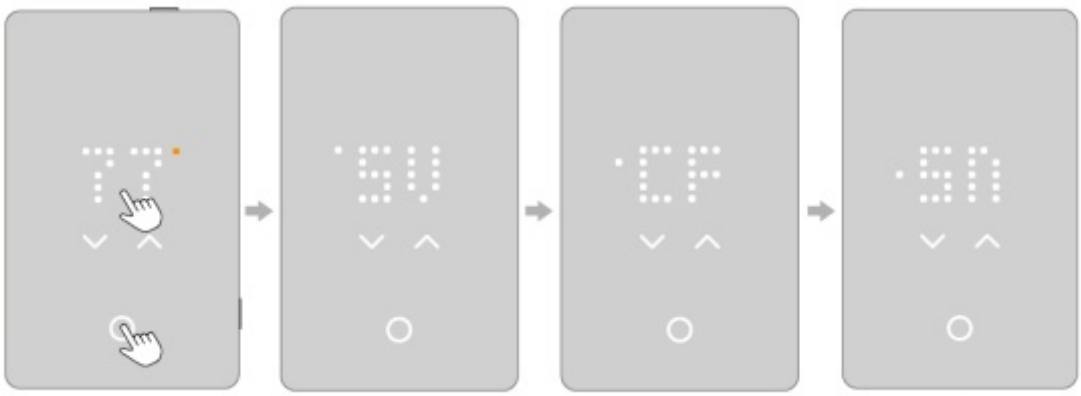
Press the **side button** for a moment to reset.

A check mark will appear to show that the GFCI has been reset and is working correctly.

If the test fails, the screen will return to the ↘ GFCI TRIPPED PRESS TO RESET display. This will continue if the cause of the tripped relay has not been resolved.

THERMOSTAT READ OUT – SUPPORT INFO

You may need to see thermostat information to identify the thermostat in a support case. You can access the information via the display.



In the active screen mode, touch the **temperature area** and the **Select/Accept** button simultaneously for **3 seconds** to access the info menu.

SV
Press the Select/Accept button to se the Software version

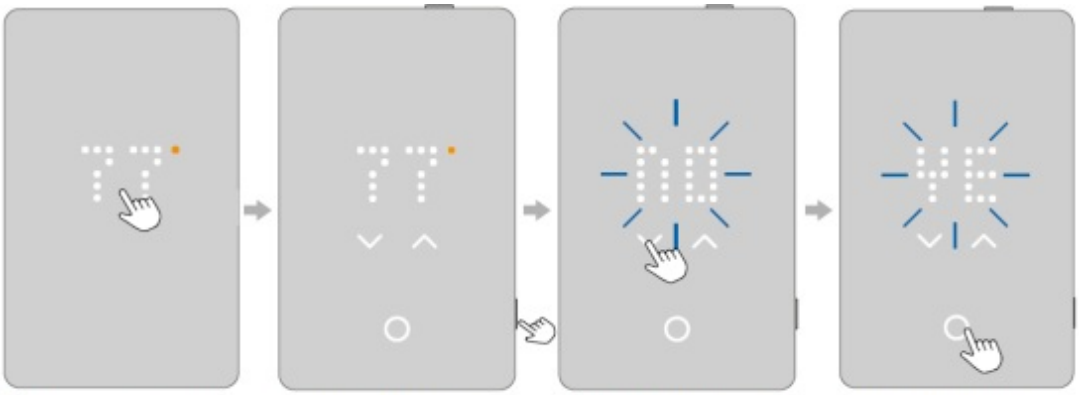
CF
Press the Select/Accept button to se the Config. Number

Sn
Press the Select/Accept button to se the Serial number

HOW TO PERFORM A FACTORY RESET

This option allows you to restore the thermostat to factory settings.

PLEASE NOTE: This action cannot be undone, and all settings will be reset to default values.



In the screen saver mode, touch the **temperature area** to wake up the thermostat. The home screen will appear.

Press the **side button** for 15 seconds.

The text RESET -NO- will scroll from right to left. Use the **up and down arrows** to switch to RESET -YES-.

Tap the **select/accept button** to confirm. the thermostat will perform a reset.

ERRORS AND INDICATIONS

- **E0**

  Internal failure.

  The thermostat is defective. Contact your contractor or reseller. The thermostat must be replaced.
- **E1**

  The internal sensor is defective or short-circuited.

  Contact your contractor or reseller. The thermostat must be replaced.
- **E2**

  The external wired floor sensois r is disconnected, defective, or short-circuited.

  Contact your contractor or reseller for reconnection or a replacement.
- **E3**

  The internal compensation sensor is defective.

  Contact your contractor or reseller for a replacement.
- **E5**

  Internal overheating.

  Contact your contractor or reseller to arrange an inspection of the installation.

FAQs

- **Q: Can I adjust the temperature using this thermostat?**

  A: Yes, you can change the temperature easily by following the instructions provided in section 4 of the user manual.

- **Q: How do I perform a factory reset on the thermostat?**

  A: You can perform a factory reset by following the steps outlined in section 13 of the user manual.

Documents / Resources

	OJ ELECTRONICS UTN5 OJ Microline Non Programmable Thermostat [pdf] User Manual UTN5, UTN5 OJ Microline Non Programmable Thermostat, OJ Microline Non Programmable Thermostat, Non Programmable Thermostat, Programmable Thermostat, Thermostat

References

- OJ Electronics | know-how Creates Strong Partnerships
- User Manual