



SpotNRG Evesta C thermostat Installation and operating instructions

TFT THERMOSTAT – SETUP

This manual describes the most essential functions and technical specifications of the thermostat. These instructions help the user to control the thermostat, and the electrician to install and setup the thermostat.

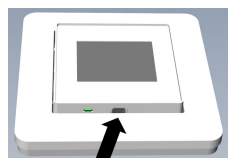
TECHNICAL SPECIFICATIONS

Display: 1.8" TFT, 128x160 resolution
Power supply: 230V - 50/60 Hz
Maximum load: 16A (resistive)
Setpoint temperature range: +5°C/+40°C
Usage temperature range: +0°C/+40°C
Temperature setback: Pilot wire 230V - 50/60 Hz
IP class: IP21
Standard Color: White RAL9003, later also black
Sensors: Built-in room sensor and floor sensor NTC 10k included
Approvals: CE, EN 60730-1, EN 60730-2-9, EN 300 328 V2.2.2
Wi-Fi: 2.4GHz 802.11bgn

INSTALLATION

Installation must be done by a qualified electrician in accordance with wiring and building regulations. Before installation, disconnect any power to the thermostat's mains. During installation of the thermostat, power to the thermostat must be disconnected or isolated AT ALL TIMES!

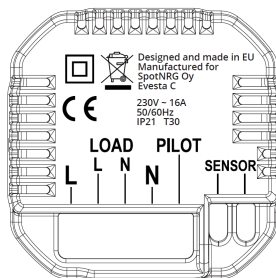
Release the front cover by pressing with a screwdriver from the ejector latch at the bottom of the thermostat.



Now connect the wires to the thermostat's terminals:

L: Power connection (Live)
N: Power connection (Neutral)
LOAD (L): Heating Cable connection (Live)
LOAD (N): Heating Cable connection (Neutral)
PILOT: Pilot Wire (if applicable)
SENSOR: Floor temp sensor, NTC type

Wires must be stripped 9-10mm. Wires can be released by pressing the connector's release switch. Floor sensor must be placed into protective tube in concrete. Make sure there is no water in the tube.



Next, position the thermostat and fasten it onto the wall's mounting box using 2-4 screws. Open the frame retaining spring, position the frame and close the spring. Then attach the front part, make sure the connector between front and bottom part is correctly placed. Press the front part until it snaps in place. The front part can be later removed by pressing the ejector latch.

STARTUP

After connecting power to the thermostat for the first time or after performing a factory reset, a startup wizard will prompt the following questions:

| | |
|-------------------------|---|
| Language | Set language |
| Set timezone | Timezone compared to GMT |
| Date & time | Set current date & time |
| Daylight saving | Daylight saving in use Y/N |
| Thermostat use | Heating or Cooling |
| Heating system | Floor (Slow), Floor (Fast), Other (Fast) |
| Floor type | Concrete or wooden |
| Floor Temp limit | 5-40 or 5-28 wood |
| Regulate | Room or floor |
| Load Size | Size of the heating element in Watts |
| Gradual Heating | ON or OFF, can be used with new concrete floors to limit temperature rise time. |

Note: Wooden floor requires that a floor sensor is connected. Thus, floor temp is limited to 28°C.

SYMBOLS

| | | | |
|--|---|--|----------------|
| | Heating active | | Cooling active |
| | Wooden floor has reached the maximum temperature 28°C, thus heating is being limited. | | |
| | Home | | Away |
| | Gradual heating | | Antifrost |
| | Power Regulation | | Cooling |
| | Week Schedule | | |

TFT THERMOSTAT – USER MANUAL

1 Control

The thermostat is controlled by three touch sensitive capacitive buttons. These are:

- Left (Up)
- Center (Confirm)
- Right (Down)

Each button has its own background light. At any time, when any of the buttons' background light is lit, the button is available for use.

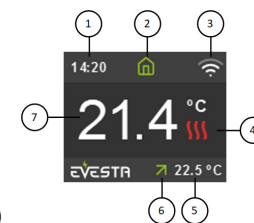
TIP: Holding the left button for 2 seconds at any time will make a quick return to the main screen.

TIP: While browsing the thermostat's menu, pause at any menu item for a while, and a help text will be shown. This help text gives useful information and guides the user through the functions related to that menu item. The help text delay can be adjusted under "Settings" in the main menu.

2 Standby and Main screen

When the thermostat remains untouched for a while, it will automatically go to stand-by screen. While in stand-by, touching any of the buttons will display the main screen below:

1. Time
2. Operation mode
3. Wi-Fi indicator
4. Heating indicator
5. Setpoint
6. Electricity cost opt.
7. Measured temp. (Room or floor sensor)



In electricity cost optimization, when setpoint is raised during cheap electricity, it is indicated with a green arrow. Drop during expensive times is indicated with red arrow.

In the main screen, pressing the center button will access the main menu. Pressing left or right button will change the set temperature.

3 Menu items

The main menu has the following items:

| | |
|--------------------|--------------------------|
| Operation Mode | See 4 Operation Mode |
| Week schedule | See 5 Week schedule |
| Settings | Adjust the settings |
| Wi-Fi | Adjust Wi-Fi settings |
| Energy consumption | Show energy consumption |
| Child Lock | Activate key lock |
| Info | Thermostat information |
| Shut down | Switch thermostat on/off |

TIP: “Energy Consumption” shows consumption statistics over different time periods. Press center button to reset statistics.

TIP: Select “Child Lock” and press center button for three times activate/deactivate key lock.

4 Operation mode

The thermostat has three main modes: Home, Away and Week schedule. The additional modes are Anti-frost and Power regulation.



Home

Preset temperature while you are home. The temperature setting can be changed by the user and it is saved.



Away

Preset (reduced) temperature while you are away. The temperature setting can be changed by the user and it is saved. External pilot signal will also change operation mode between Home and Away.



Week schedule

Thermostat follows the settings programmed in Week schedule menu. Programming can also be done with phone application.



Antifrost

This mode drops setpoint to 7 degrees. It can be used e.g. in summer cottage during winter time.



Power regulation

Engineering mode, which operates without feedback from sensors. Relay conduction time is selected e.g. 20% relay is ON 20% and 80% OFF during the cycle time. Cycle repeats automatically.

Note! Usage without floor sensor may damage floor, if temperature is let to raise too high.

5 Week schedule

Create customized daily schedules to minimize energy consumption and maximize comfort. There can be up to five set points per day. A set point is given a target set time and a target set temperature for the thermostat to regulate automatically.

You can view your daily heating schedule in this menu. Set points can be added and removed according to your preferences.

TIP: Create a daily schedule for a weekday according to your preferences. Then use the copy/paste function to duplicate the given day's scheme to other weekdays.

6 Advanced Settings

WARNING: Advanced Settings is recommended only for expert users. Consult your supplier or use with extreme caution! Incorrect settings may damage your floor or heating system!

Advanced settings menu has the following items:

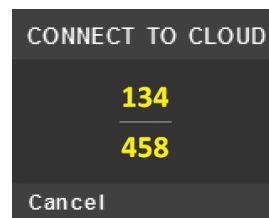
| | |
|--------------------------------|--|
| Heating System | Change heating or cooling |
| NTC sensor type | Change NTC type |
| Hysteresis | Change temp variation |
| Temperature calibration | Fine tune temp measuring |
| Temperature limits | Set limits for room and floor temperatures |
| Pilot wire | Change pilot wire setting |
| Adaptivity | See description below |
| Factory reset | Perform full factory reset |
| Restart device | Perform reboot. |

ADAPTIVITY: The thermostat will automatically start/stop heating proactively to reach the set temperature at the set time. If adaptivity is switched off, the thermostat will start/stop heating at the set time instead of operating proactively to reach the set temperature at the set time.

7 Wi-Fi settings

When the thermostat is not connected to the cloud “Connect to cloud” can be started from Wi-Fi settings menu. Connection is done together with phone application “Add thermostat” function.

Thermostat will show two three-digit PIN codes, which will be copied to the phone application. The password for the selected Wi-Fi network will be given in the phone application.



When the Add Thermostat operation is finalized thermostat will reboot.

After the thermostat is connected to the cloud the Wi-Fi settings menu will offer the possibility to turn Wi-Fi OFF/ON. Existing Wi-Fi settings will be used when turning Wi-Fi back to ON.

To change Wi-Fi network or password please use Connect to cloud menu together with phone application's Reconfigure Wi-Fi menu.

8 Electricity cost optimization

Activate electricity cost optimization using the phone app. The setting is thermostat-specific and can be found under the gear menu in the upper right corner of the thermostat view of the phone application. Check the location of the thermostat

in the application. The location is used to select the right electricity price area and weather forecast. Choose how many degrees the temperature setpoint is automatically raised during cheap electricity. Also choose how much setpoint will be dropped during expensive electricity. When the average temperature of the next day exceeds the "Forecast save limit" setting, the setpoint is not raised during cheap electricity i.e., no heating to the reserve is done. Also select the number of raise and drop hours. You can monitor the operation of price optimization and achieved savings under the "Reports" tab of the phone application.

9 Link to Phone Application

Link to Android and iPhone phone application.

