

WENGART WG502

Wengart WG502 Smart Touch Screen Thermostat User Manual

Model: WG502 | Brand: WENGART

1. INTRODUCTION

Welcome to the Wengart WG502 Smart Touch Screen Thermostat user manual. This document provides essential information for the safe and efficient installation, operation, and maintenance of your new thermostat. Please read these instructions carefully before installation and use, and retain them for future reference.

The Wengart WG502 thermostat is designed for controlling electric floor heating systems, offering precise temperature management and energy-saving features. Its elegant design and intuitive touch interface make it a convenient addition to any modern home or commercial space.

2. PRODUCT OVERVIEW AND FEATURES

The Wengart WG502 thermostat combines advanced functionality with a user-friendly design. Key features include:

- **Automatic Temperature Control:** Automatically detects ambient temperature and maintains the desired setting with a control accuracy of $\pm 1^{\circ}\text{C}$.
- **Clear LCD Display:** Features a backlit LCD screen for easy readability, even in low-light conditions.
- **Temperature Calibration:** Allows for precise calibration of the measured room temperature with an accuracy of $\pm 1^{\circ}\text{C}$.
- **Actuator Compatibility:** Supports connection to both normally open and normally closed actuators.
- **Power-Off Memory:** All settings are retained in the event of a power failure, eliminating the need for re-configuration.
- **Touch Control Interface:** Intuitive touch buttons for easy operation.
- **Energy-Saving Modes:** Selectable manual or energy-saving operation modes.
- **Durable Construction:** Made from polycarbonate and ABS materials with an IP20 protection rating.

Main Functions



**Brief
Outward**



**Touch
Control**



**Two
Patterns**



**Energy
Saving**



**Easy
Installation**



**LED
Display**



**Polycarbonate
Thermoplastic**



**Frost
Protection**



Image: Overview of the Wengart WG502 thermostat's main functions, including brief outward design, touch control, two patterns, energy saving, easy installation, LED display, polycarbonate thermoplastic, and frost protection.

3. SETUP AND INSTALLATION

Important: Installation should only be performed by a qualified electrician in accordance with local electrical codes and regulations. Ensure the main power supply is disconnected before beginning any installation work.

3.1 Package Contents

- 1 x Wengart WG502 Thermostat
- 2 x Mounting Screws
- 1 x User Manual

3.2 Dimensions

PRODUCT SIZE

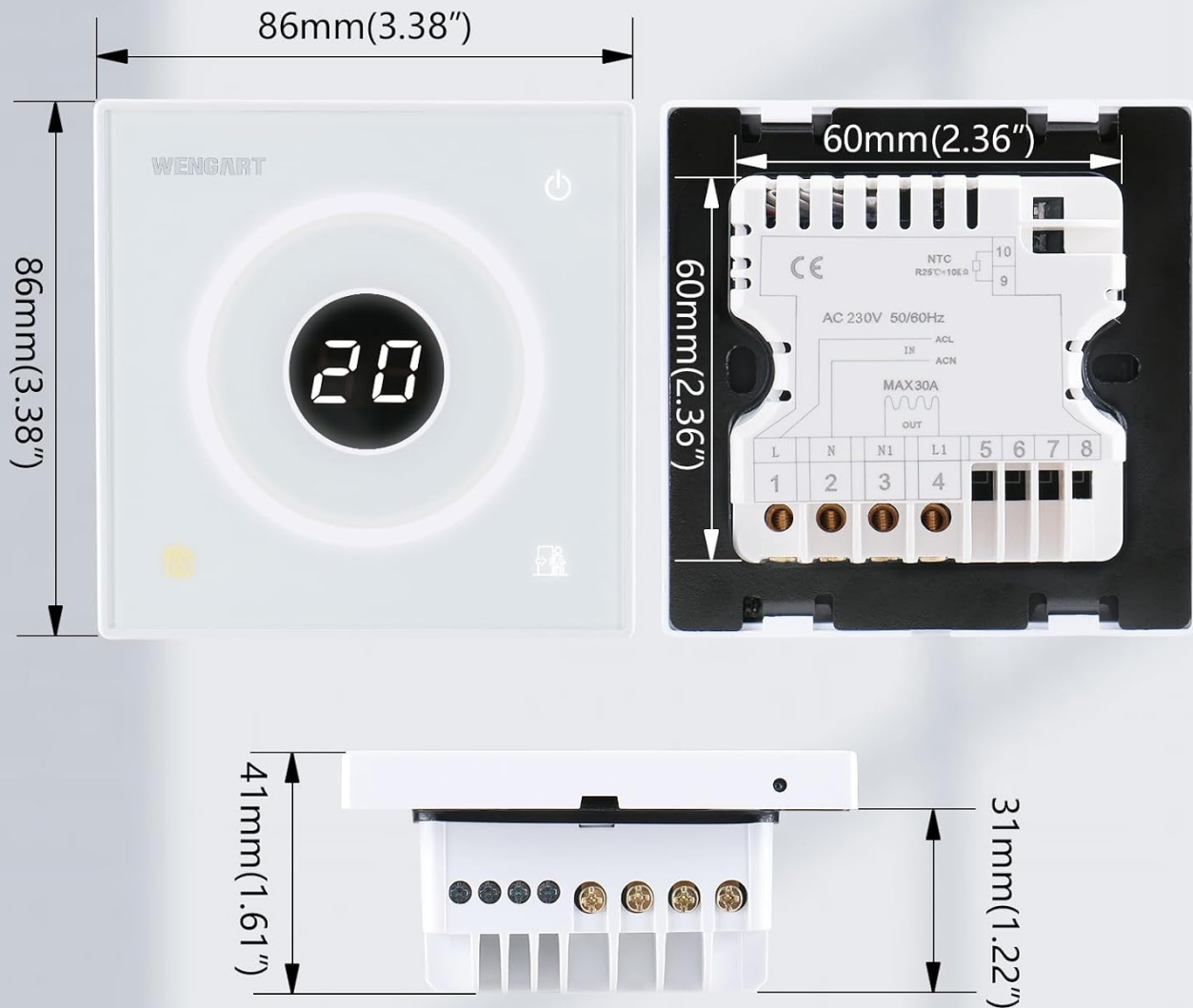


Image: Detailed dimensions of the Wengart WG502 thermostat, showing front panel measurements of 86mm x 86mm (3.38 inches x 3.38 inches) and a depth of 41mm (1.61 inches) from the front to the back of the mounting box, with the visible portion being 31mm (1.22 inches) deep.

The thermostat measures 86mm x 86mm x 39mm (L x W x H). Ensure adequate space in the wall box for installation.

3.3 Wiring Diagram

Follow the wiring diagram carefully. Incorrect wiring can damage the thermostat or the heating system.

Wiring Diagram

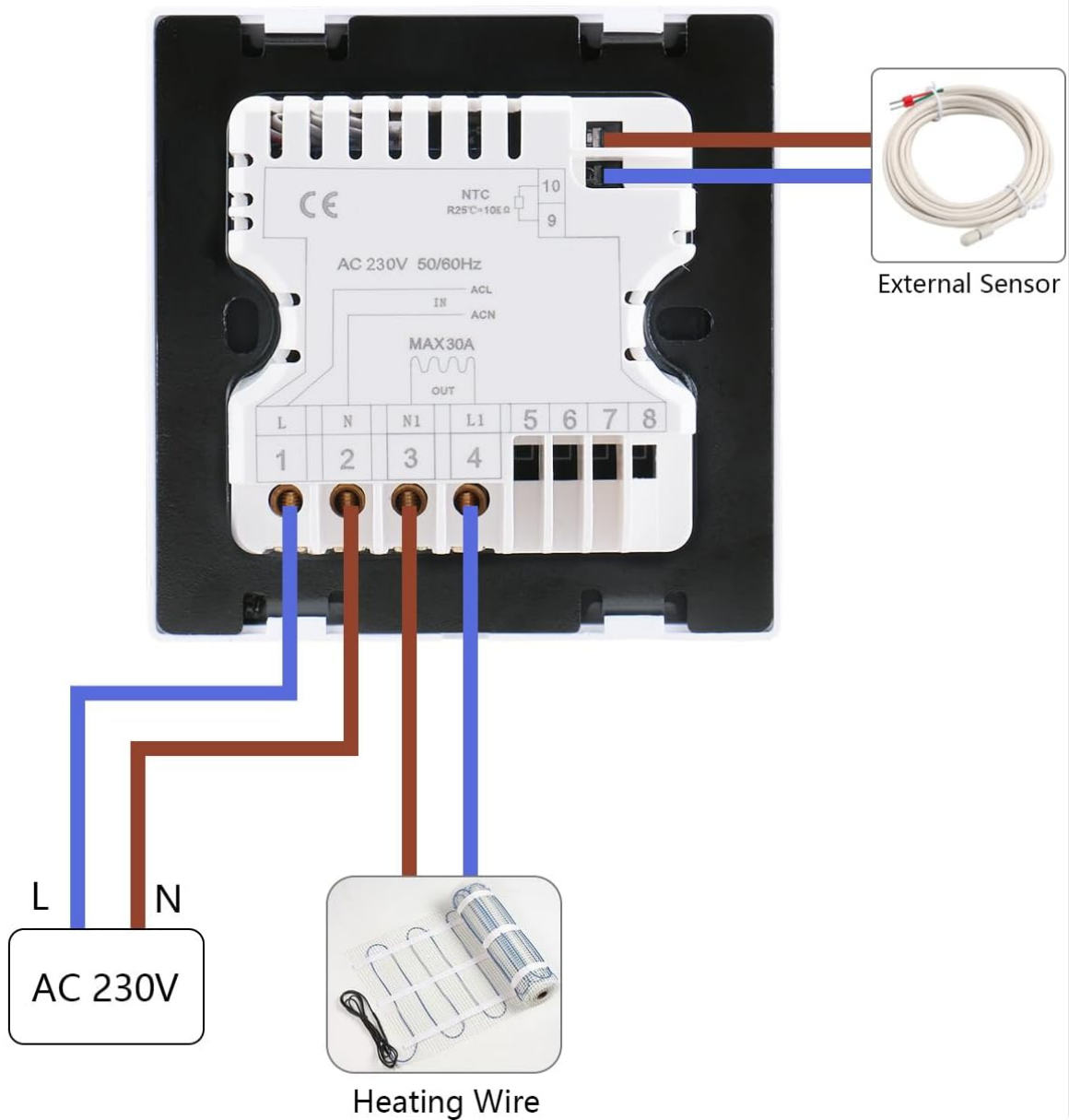


Image: Wiring diagram for the Wengart WG502 thermostat. It shows connections for AC 230V (L and N), Heating Wire (L1 and N1), and an External NTC Sensor (terminals 9 and 10). The thermostat supports a maximum load of 30A.

1. Connect the Live (L) and Neutral (N) wires from your AC 230V power supply to the corresponding terminals on the thermostat.
2. Connect the Live (L1) and Neutral (N1) wires of your electric heating system (heating wire/mat) to the designated output terminals.
3. Connect the external NTC temperature sensor to terminals 9 and 10. This sensor is crucial for accurate floor temperature measurement.
4. Ensure all connections are secure and properly insulated.
5. Mount the thermostat into the wall box using the provided screws.

4. OPERATING INSTRUCTIONS

The Wengart WG502 thermostat features a touch-sensitive interface for easy control.

Product Analysis

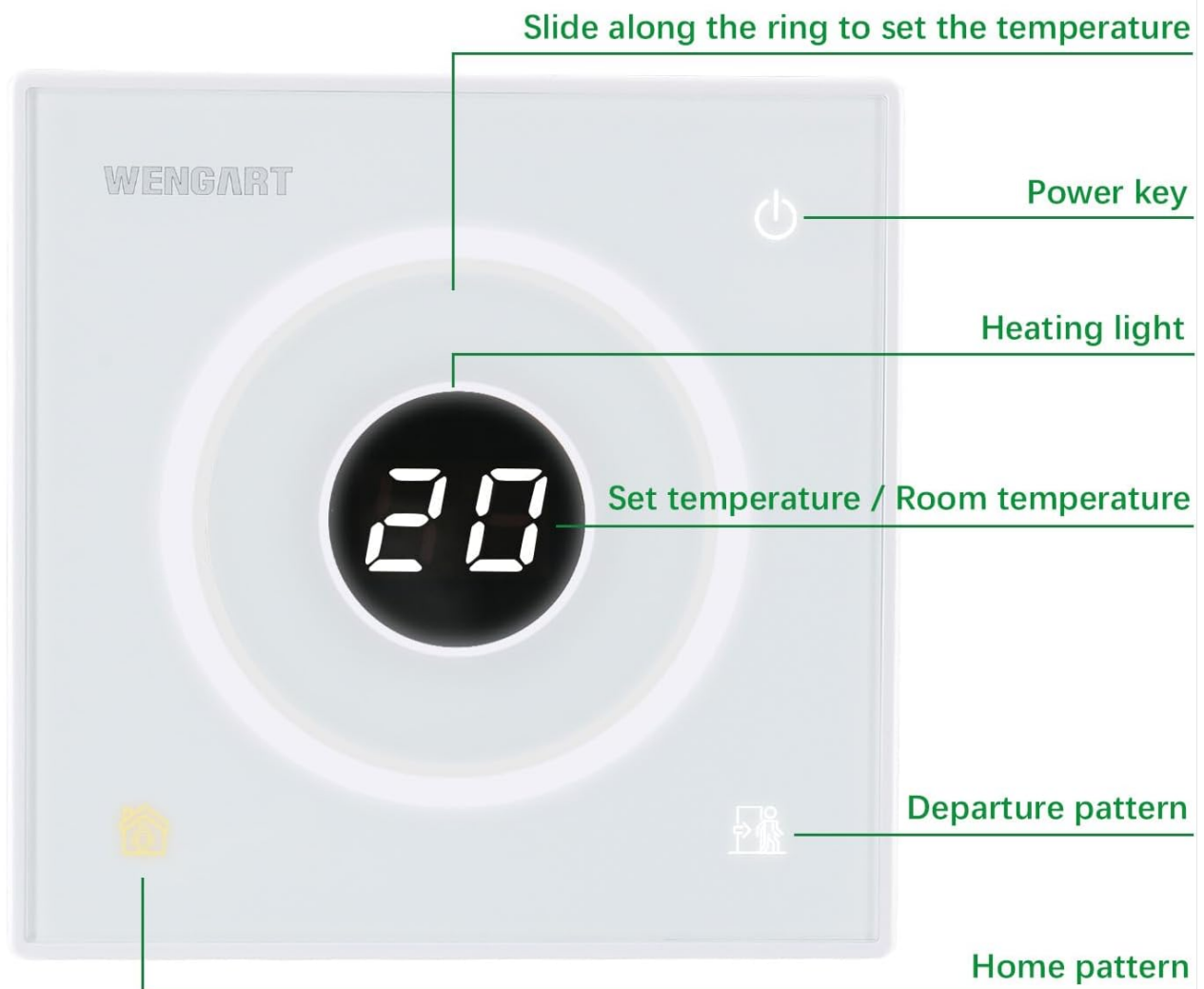


Image: Diagram illustrating the user interface of the Wengart WG502 thermostat, highlighting the Power key, Heating light, Set temperature / Room temperature display, and the areas for Home pattern and Departure pattern selection. The central ring allows for temperature adjustment by sliding a finger.

4.1 Basic Operation

- **Power Key:** Press the power icon (top right) to turn the thermostat ON or OFF.
- **Temperature Display:** The central LED display shows the current room temperature or the set temperature.
- **Setting Temperature:** Slide your finger along the illuminated ring around the central display to adjust the desired temperature. The display will show the new setpoint temporarily.
- **Heating Light:** An indicator light (usually below the power key) illuminates when the heating system is active.

4.2 Operating Modes (Patterns)

The thermostat supports different operating patterns to suit your needs:

Two Patterns

You can customize the temperature at home and when you go out



Image: Illustration of the two customizable patterns on the Wengart WG502 thermostat: 'Home Pattern' showing a set temperature of 20 degrees Celsius for comfort, and 'Departure Pattern' showing a set temperature of 15 degrees Celsius for energy saving when away.

- **Home Pattern:** Designed for comfort when you are at home. Typically set to a higher temperature (e.g., 20°C). Activate this mode by touching the 'Home' icon (bottom left).
- **Departure Pattern:** Designed for energy saving when you are away. Typically set to a lower temperature (e.g., 15°C). Activate this mode by touching the 'Departure' icon (bottom right).

Refer to the full manual for advanced settings, including programming schedules and sensor calibration, if available.

5. MAINTENANCE

The Wengart WG502 thermostat requires minimal maintenance.

- **Cleaning:** Wipe the screen and casing with a soft, dry cloth. Do not use abrasive cleaners, solvents, or chemical sprays, as these can damage the surface.
- **Inspection:** Periodically check the thermostat for any signs of damage or loose connections. If any issues are found, consult a qualified electrician.
- **Software Updates:** If the thermostat supports Wi-Fi connectivity, check the manufacturer's website or app for

any available firmware updates to ensure optimal performance and security.

6. TROUBLESHOOTING

If you encounter issues with your Wengart WG502 thermostat, try the following troubleshooting steps:

- **No Power/Display Off:**

- Check the main power supply to the thermostat.
- Ensure the circuit breaker for the heating system is not tripped.
- Verify all wiring connections are secure.

- **Heating Not Activating:**

- Ensure the thermostat is powered ON and the desired temperature is set higher than the current room temperature.
- Check if the heating light indicator is on.
- Verify the external NTC sensor is properly connected and functioning. A faulty sensor can prevent heating.
- Confirm the heating system (e.g., heating mat) itself is operational.

- **Incorrect Temperature Reading:**

- Ensure the thermostat is not exposed to direct sunlight, drafts, or other heat sources that could affect its internal sensor.
- If using an external sensor, check its placement and connection.
- Calibrate the temperature if necessary (refer to advanced settings in the full manual).

- **Unresponsive Touch Screen:**

- Turn the thermostat off and on again (power cycle).
- Ensure the screen is clean and dry.

If these steps do not resolve the issue, contact a qualified technician or Wengart customer support for assistance.

7. SPECIFICATIONS

Feature	Specification
Model Number	WG502
Voltage	AC 230V 50/60Hz
Power Consumption	2 W
Maximum Resistive Load	30 A
Temperature Display Accuracy	±1°C
Temperature Control Accuracy	±1°C
Display Type	LCD with LED Backlight
Setting Range	5°C to 35°C
Ambient Temperature Range	-5°C to 50°C
Sensor	Internal / External NTC
Dimensions (L x W x H)	86 x 86 x 39 mm
Shell Material	Polycarbonate (PC) and ABS
Protection Class	IP20
Control Method	Touch
Connectivity	Wi-Fi and Wired
Mounting Type	Floor Mounting
Weight	240 Grams

8. WARRANTY AND SUPPORT

Wengart products are manufactured to high-quality standards. For information regarding warranty coverage, technical support, or service, please refer to the warranty card included with your product or contact Wengart customer service directly. Keep your purchase receipt as proof of purchase.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question