

WENGART WG316

Wengart WG316 Programmable Thermostat User Manual

Model: WG316 | Brand: WENGART

1. INTRODUCTION

The Wengart WG316 Programmable Thermostat is designed for precise temperature control in radiant water floor heating and gas boiler systems. This thermostat provides a touch-screen interface and 7-day weekly programming for efficient heating management.

2. SAFETY INFORMATION AND IMPORTANT WARNINGS

WARNING: Electrical installation should be performed by a qualified electrician. Always turn off power at the circuit breaker before installation or maintenance.

This thermostat has a 3A current limit. It is specifically designed for low-current applications such as water heating and gas boilers. **It is NOT compatible with high-voltage electric baseboard heaters (120V-240V) or electric underfloor heating mats.** Using this unit with incompatible systems will damage the device and may pose a safety risk. Please verify your system's current requirements before installation. For optimal performance, mount the thermostat approximately 1.5 meters (5 feet) above the floor in an area with good air circulation, away from direct sunlight or drafty doors.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- Wengart WG316 Programmable Thermostat
- 2 Screws for mounting
- 1 Instruction Manual (this document)



Image: The Wengart WG316 thermostat, its packaging, two mounting screws, and the instruction manual.

4. PRODUCT OVERVIEW

The WG316 features a large LCD display with a responsive touch interface for easy operation. Its design integrates seamlessly into various home environments.



Image: Front view of the Wengart WG316 thermostat, showcasing its black touch screen display.

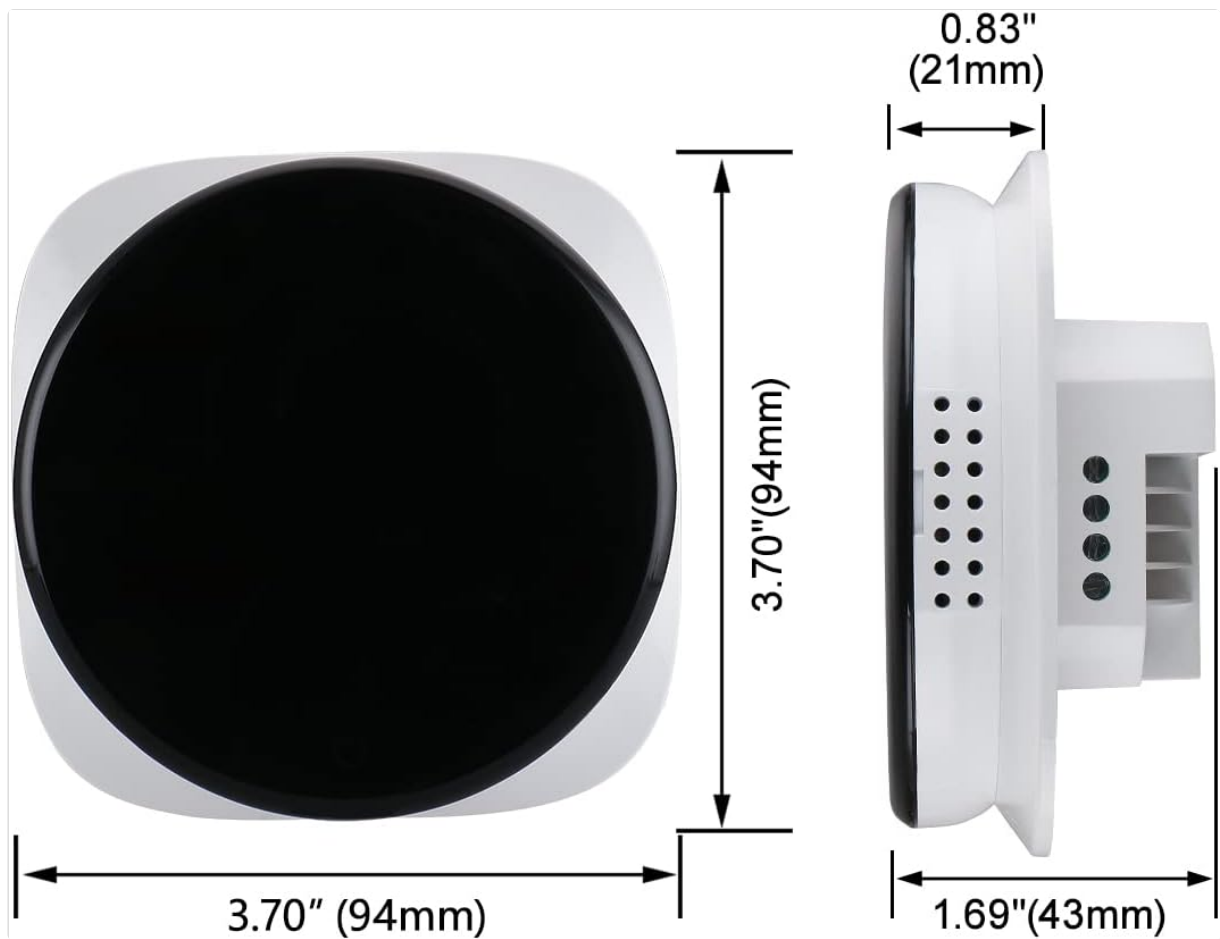


Image: The Wengart WG316 thermostat displayed in a room setting, illustrating its integration with a wall-mounted gas boiler.



Image: Side view of the Wengart WG316 thermostat, highlighting its slim profile and ventilation openings.



Image: An exploded view of the Wengart WG316 thermostat, showing its front display, rear mounting plate, and internal electronic components.

5. INSTALLATION

Before beginning installation, ensure the main power supply to your heating system is turned off at the circuit breaker.

5.1 Mounting the Thermostat

The WG316 is designed for installation in a standard junction box. Mount the thermostat base plate to the wall using the provided screws.



Image: Rear view of the Wengart WG316 thermostat, displaying the mounting plate and terminal block for electrical connections.

5.2 Wiring Instructions

Carefully follow the wiring diagram below. This thermostat is for water heating and gas boiler systems only. Incorrect wiring can damage the device and your heating system.

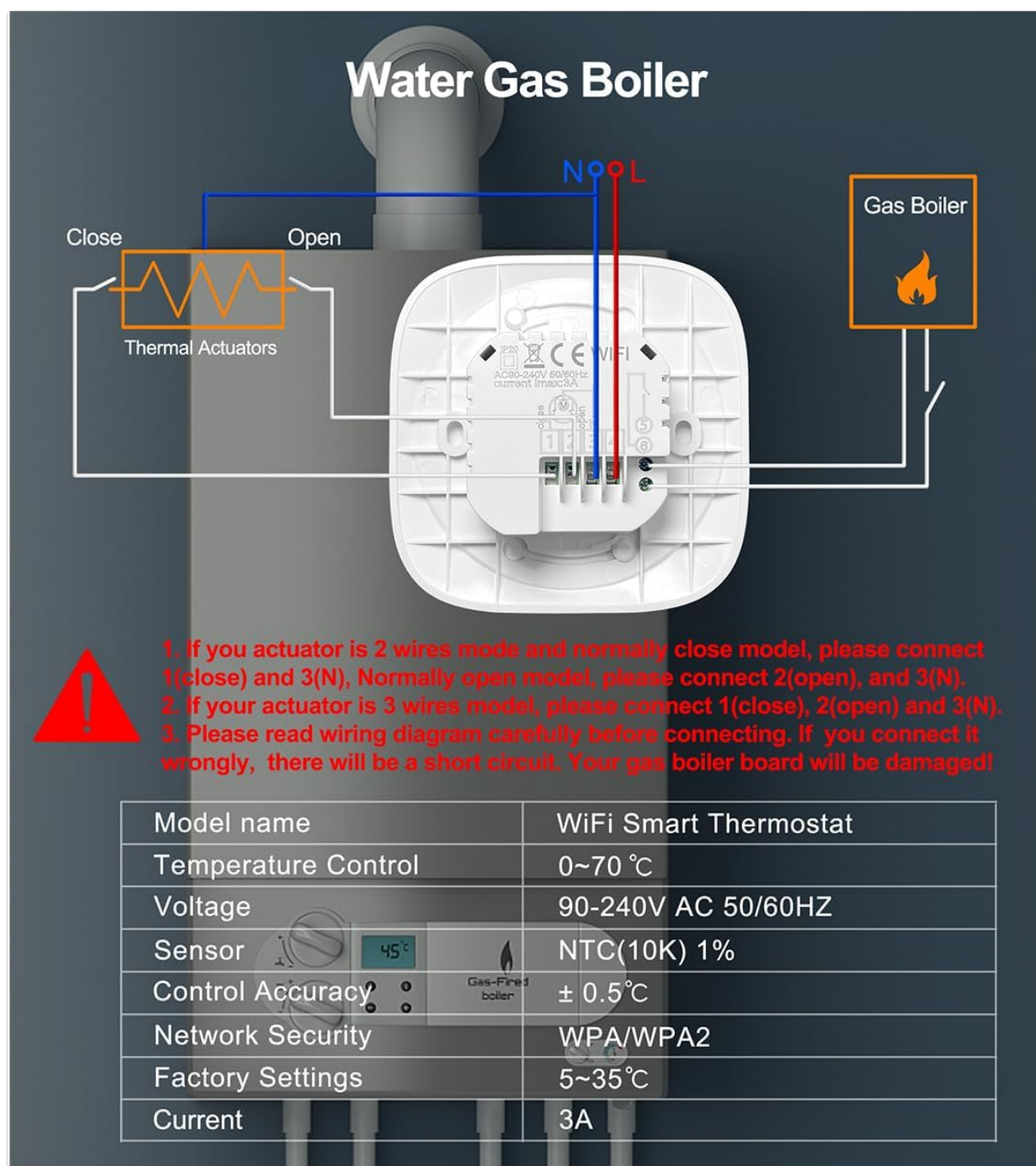


Image: Detailed wiring diagram illustrating how to connect the Wengart WG316 thermostat to a water gas boiler and thermal actuators. It shows connections for normally closed and normally open actuators.

- **Terminals 1 & 2:** Connect to thermal actuators (if applicable).
- **Terminal 3 (N):** Connect to Neutral wire.
- **Terminal 4 (L):** Connect to Live wire (AC 90-265V).
- **Terminals 5 & 6 (Dry Contact):** Connect to the gas boiler control input.

Important: If your actuator has 2 wires and is a normally closed model, connect to terminals 2 and 3(N). If your actuator has 3 wires, connect to terminals 1(close), 2(open), and 3(N). Always refer to your heating system's manual for specific wiring requirements. Connecting incorrectly can damage the gas boiler board.

6. OPERATING INSTRUCTIONS

6.1 Power On and Initial Setup

After successful installation and restoring power, the LCD display will illuminate. The thermostat will display the current room temperature and time.

6.2 Setting the Temperature

Use the touch screen interface to adjust the desired temperature. The thermostat will maintain the set temperature by controlling your heating system.

6.3 7-Day Programmable Scheduling

The WG316 allows for flexible 5+2, 6+1, or 7-day scheduling with up to 6 time periods per day. This feature helps optimize energy consumption by adjusting heating based on your daily routine. Refer to the on-screen menu for detailed programming steps.

6.4 Backlight

The LCD display features a soft backlight for visibility in low-light conditions. It is designed to provide clear information without being overly bright.

7. ADVANCED FEATURES

- **Child Lock:** Prevents unauthorized changes to settings.
- **Anti-Freeze Protection:** Automatically activates heating if the temperature drops below a set threshold to prevent pipes from freezing.
- **Temperature Compensation:** Allows for fine-tuning of temperature readings.
- **Temperature Difference Function:** Manages the hysteresis (temperature swing) for heating activation.
- **Factory Reset:** Resets all settings to their default values.

Consult the on-screen menu or specific sections of the digital manual for instructions on how to access and configure these advanced features.

8. TROUBLESHOOTING

Q: Will this thermostat work with electric baseboard heaters?

A: No. This thermostat has a 3A limit. Electric baseboard heaters typically require 12A to 16A. Using this unit on an electric heater will damage the device. It is strictly for water heating and gas boilers.

Q: What happens if there is a power outage?

A: The WG316 includes a memory function that retains all your 7-day programming. Once power is restored, your heating schedule resumes exactly where it left off.

Q: How accurate is the temperature reading?

A: It features a high-precision internal sensor with an accuracy of ±1°C.

9. SPECIFICATIONS

Feature	Detail
Brand	WENGART
Model Name	WG316

Power Supply	AC 90-265V, 50/60Hz
Load Current	3A (Low Current / Dry Contact)
Programming	7-Day Weekly (6 periods/day)
Setting Range	5°C - 95°C
Temperature Control Type	Programmable
Controller Type	Touchscreen
Display Type	LCD Touch Screen
Connectivity Technology	Wired
Mounting Type	Wall Mount (Standard Junction Box)
Special Features	Child Lock, Anti-Freeze Protection, Temperature Compensation, Temperature Difference Function, Factory Reset
Included Components	Thermostat, 2 Screws, Instruction Manual
Temperature Accuracy	±1°C



Image: Dimensions of the Wengart WG316 thermostat, indicating a width and height of 94mm (3.70 inches) and a depth of 43mm (1.69 inches).

10. MAINTENANCE

The Wengart WG316 thermostat requires minimal maintenance. Keep the screen clean using a soft, dry cloth. Avoid using abrasive cleaners or solvents. Ensure the ventilation holes on the side of the unit are not obstructed to maintain proper temperature sensing.

11. WARRANTY AND SUPPORT

For warranty information or technical support, please refer to the contact details provided by your retailer or visit the official WENGART website. Keep your purchase receipt as proof of purchase.

Manufacturer Contact Information: WENGART ELECTRIC CO.,LTD wen zhou shi wen jia dian qi you xian go qian shan cun, cheng nan jie dao, yue qing shi info@wengart.com +86 18757074231

