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› White Rodgers 1C20-101 Economy 24 Volt/Millivolt Heat Thermostat User Manual

## Camco 1C20-101

# White Rodgers 1C20-101 Economy 24 Volt/Millivolt Heat Thermostat User Manual

Brand: Camco

Model: 1C20-101

## 1. INTRODUCTION

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This manual provides detailed instructions for the installation, operation, and maintenance of your White Rodgers 1C20-101 Economy 24 Volt/Millivolt Heat Thermostat. Please read this manual thoroughly before beginning installation or operation to ensure proper function and safety. This thermostat is designed for single-stage heat-only systems, including 24 Volt and Millivolt applications.

## 2. SAFETY INFORMATION

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- **Electrical Hazard:** Always disconnect power to the heating system at the main fuse or circuit breaker before installing or servicing the thermostat. Failure to do so may result in electrical shock or equipment damage.
- **System Compatibility:** This thermostat is designed exclusively for 24 Volt or Millivolt heat-only systems. Do not use it with line voltage systems (120V/240V) or with heating/cooling systems.
- **Professional Installation:** If you are unsure about any part of the installation process, consult a qualified electrician or HVAC technician.
- **Mercury-Free:** This thermostat is mercury-free. Dispose of old thermostats according to local regulations.

## 3. PRODUCT OVERVIEW

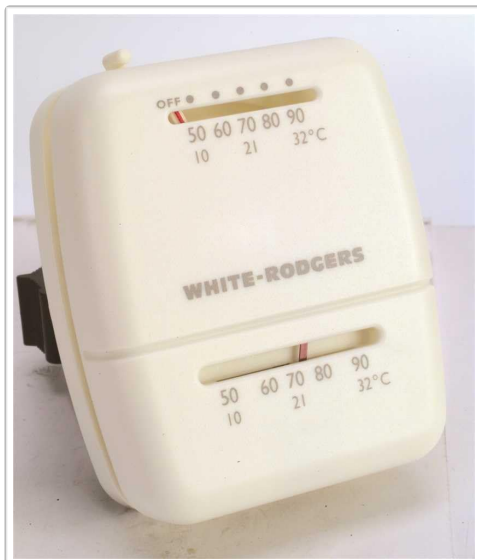
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The White Rodgers 1C20-101 is a reliable, mechanical heat-only thermostat designed for simplicity and durability. It features a manual dial for temperature control and is suitable for various single-stage heating

applications, including RVs, campers, and motorhomes.



**Figure 3.1:** Front view of the White Rodgers 1C20-101 thermostat, showing the temperature dial and the White Rodgers branding.



**Figure 3.2:** Angled view of the White Rodgers 1C20-101 thermostat, highlighting its compact design and the 'OFF' position indicator.



**Figure 3.3:** Diagram illustrating the dimensions of the thermostat: approximately 5.75 inches in length, 5.13 inches in height, and 2.0 inches in width. The weight is approximately 0.32 lbs.

## Key Features:

- Heat Only Thermostat
- Mercury-free mechanical design
- Rugged snap-action contacts for reliable operation
- Adjustable heat anticipator for precise temperature control
- Integrated bimetal thermometer
- Compatible with single-stage 24 Volt and Millivolt heating systems

## 4. SETUP AND INSTALLATION

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Follow these steps for proper installation of your new thermostat. Ensure power is disconnected before proceeding.

1. **Disconnect Power:** Locate the main power switch or circuit breaker for your heating system and turn it OFF. Verify that the power is off before proceeding.
2. **Remove Old Thermostat (if applicable):** Carefully remove the cover of your old thermostat. Disconnect the wires one by one, labeling each wire with the terminal it was connected to (e.g., R, W, G, Y) to ensure correct re-connection. Note that this thermostat is for heat-only systems, so you will primarily be concerned with heat-related wiring.
3. **Mount New Thermostat:** Position the new thermostat base on the wall where the old thermostat was located. Use the provided mounting hardware to secure the base firmly to the wall. Ensure it is level for accurate temperature readings.
4. **Connect Wires:** Connect the labeled wires to the corresponding terminals on the new thermostat. For a typical heat-only system, you will connect the 'R' (or 'Rh') wire to the R terminal and the 'W' wire to the W terminal. Refer to your heating system's manual for specific wiring diagrams if needed.
5. **Adjust Heat Anticipator:** The thermostat features an adjustable heat anticipator. This setting helps prevent temperature overshoot and ensures consistent heating cycles. The factory setting is usually suitable, but if your system cycles too frequently or infrequently, you may need to adjust it. Typically, a longer anticipator setting (higher number) will result in longer heating cycles and fewer cycles per hour, while a shorter setting (lower number) will result in shorter, more frequent cycles. Make small adjustments and observe system behavior over several hours.
6. **Install Thermostat Cover:** Once wiring is complete and secure, carefully snap the thermostat cover onto the base.
7. **Restore Power:** Turn the power back ON at the main fuse or circuit breaker.



**Figure 4.1:** The White Rodgers 1C20-101 thermostat installed on a wall, demonstrating its discreet and functional appearance in a typical indoor setting.

## 5. OPERATING INSTRUCTIONS

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Operating the White Rodgers 1C20-101 thermostat is straightforward due to its manual design.

### Setting the Temperature:

- The thermostat features a sliding lever on the front face.
- To adjust the desired temperature, simply slide the lever to the left or right until the indicator aligns with your preferred temperature setting on the scale (ranging from 50°F to 90°F, or 10°C to 32°C).
- The thermostat will automatically turn your heating system ON when the room temperature falls below your set point and turn it OFF when the room temperature reaches your set point.

### OFF Position:

- For periods when heating is not required, such as during warmer months or when leaving the property for an extended time, slide the lever completely to the left into the 'OFF' position. This will prevent the heating system from activating.

## 6. MAINTENANCE

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The White Rodgers 1C20-101 thermostat requires minimal maintenance to ensure continued accurate operation.

- **Cleaning:** Periodically wipe the exterior of the thermostat with a soft, damp cloth to remove dust and grime. Do not use abrasive cleaners, solvents, or chemical sprays, as these can damage the plastic casing or internal components.
- **Airflow:** Ensure that the thermostat is not obstructed by furniture, curtains, or other objects that could block airflow to the sensor, as this can lead to inaccurate temperature readings.
- **Internal Components:** The thermostat is a sealed unit and does not require internal cleaning or lubrication. Do not attempt to open the thermostat casing beyond what is necessary for installation or wiring.

## 7. TROUBLESHOOTING

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If you experience issues with your thermostat, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Heating system does not turn ON.	No power to the heating system. Thermostat set to 'OFF'. Incorrect wiring. Heating system malfunction.	Check circuit breaker/fuse. Slide temperature lever above current room temperature. Verify wiring connections are secure and correct. Consult heating system manual or technician.
Heating system does not turn OFF.	Thermostat set too high. Faulty thermostat. Heating system malfunction.	Slide temperature lever below current room temperature. If issue persists, thermostat may need replacement. Consult heating system manual or technician.
Temperature is inaccurate or inconsistent.	Thermostat location. Heat anticipator setting. Drafts or direct sunlight.	Ensure thermostat is not near heat sources, cold drafts, or direct sunlight. Adjust the heat anticipator slightly (see Section 4). Small adjustments are key. Relocate thermostat if necessary.
Thermostat clicks but heating does not start.	Wiring issue. Heating system problem.	Check wiring connections. Ensure solid contact. The thermostat is signaling, but the heating unit is not responding. Consult heating system manual or technician.

If troubleshooting steps do not resolve the issue, it may indicate a problem with the thermostat itself or your heating system. In such cases, it is recommended to contact a qualified professional.

## 8. SPECIFICATIONS

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Specification	Detail
Brand	Camco (Manufacturer: White Rodgers)
Model Name	White Rodgers 1C20-101 Heat Only Mechanical Thermostat
Controller Type	Mechanical knob / Dial Control
Special Feature	Low Voltage, Mercury-Free
Color	White
Specific Uses For Product	Boiler, Furnace (Single-stage heat only)
Temperature Control Type	Manual
Included Components	White Rodgers 1C20-101 Heat Only Mechanical Thermostat
Power Source	Low Voltage (24 Volts / Millivolt)
Item Weight	4 ounces (0.25 lbs)
Product Dimensions	6 x 6 x 2 inches (approx. 5.75" L x 5.13" H x 2.0" W)
Mounting Type	Wall Mount

## 9. WARRANTY INFORMATION

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Specific warranty details for the White Rodgers 1C20-101 thermostat are not provided in this manual. For warranty information, please refer to the product packaging or contact Camco customer support directly.

## 10. SUPPORT

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For further assistance, technical support, or inquiries regarding your White Rodgers 1C20-101 thermostat, please contact the manufacturer or seller. You may find contact information on the product packaging or the official Camco website.

**Camco Official Website:** [www.camco.com](http://www.camco.com)