

White-Rodgers M100

White Rodgers Economy Thermostat Heat & Cool 24 V M100 User Manual

Model: M100

1. PRODUCT OVERVIEW

The White Rodgers M100 Economy Thermostat is designed for reliable temperature control in residential applications. This mercury-free mechanical thermostat is suitable for single-stage heating and air conditioning systems operating on 24-volt and millivolt systems. Its simple design ensures ease of use and installation.



Figure 1: Front view of the White Rodgers M100 Economy Thermostat. The thermostat features two sliders for temperature setting, marked in both Fahrenheit (50-90) and Celsius (10-32°C). The top slider includes an 'OFF' position. The White Rodgers logo is visible in the center.

2. SAFETY INFORMATION

- Always turn off power to the heating/cooling system at the main fuse or circuit breaker panel before

installing or servicing the thermostat.

- Installation should be performed by a qualified technician if you are unsure about any steps.
- Ensure all wiring connections are secure to prevent electrical hazards.
- This thermostat is designed for 24-volt and millivolt systems only. Do not use with line voltage systems (120V/240V).

3. INSTALLATION GUIDE

3.1 Tools Required

- Screwdriver (Phillips and/or flathead)
- Drill with appropriate drill bits (if new mounting holes are needed)
- Wire strippers (if wires are not pre-stripped)

3.2 Removing the Old Thermostat

1. **Turn off power:** Locate the main power switch for your heating and cooling system (usually at the furnace or electrical panel) and turn it OFF.
2. **Remove cover:** Carefully remove the cover of your old thermostat.
3. **Photograph wiring:** Take a clear picture of the wiring connections, noting which wire is connected to which terminal. This will be crucial for correct installation of the new thermostat.
4. **Disconnect wires:** Loosen the terminal screws and carefully disconnect the wires.
5. **Remove mounting plate:** Unscrew and remove the old thermostat's mounting plate from the wall.

3.3 Mounting the New Thermostat

1. **Separate base:** Gently separate the front cover of the M100 thermostat from its base plate.
2. **Position base plate:** Hold the new thermostat base plate against the wall where you want to mount it. Ensure it is level.
3. **Mark and drill:** Mark the positions for the mounting screws. If necessary, drill pilot holes.
4. **Secure base plate:** Feed the thermostat wires through the opening in the base plate and secure the base plate to the wall using the provided screws.

3.4 Wiring Connections

Refer to the photograph taken in step 3.2.3 and the wiring diagram below (if applicable) to connect the wires to the corresponding terminals on the M100 thermostat.

- **R (or Rh/Rc):** 24V power (usually red wire)
- **W:** Heat call (usually white wire)
- **Y:** Cool call (usually yellow wire)
- **G:** Fan (usually green wire)
- **C:** Common (optional, for continuous power, usually blue or black wire)

Note: If your old thermostat had different terminal labels, consult a professional or the specific wiring diagram for your HVAC system.

3.5 Completing Installation

1. **Attach cover:** Once wiring is complete and secure, carefully snap the front cover onto the thermostat base plate.

2. **Restore power:** Turn the power back ON at the main fuse or circuit breaker panel.
3. **Test system:** Proceed to the "Operating Instructions" section to test your new thermostat.

4. OPERATING INSTRUCTIONS

The White Rodgers M100 thermostat features two simple slider controls for operation.

4.1 Setting the System Mode (Top Slider)

The top slider controls the system mode:

- **OFF:** Turns off both heating and cooling systems.
- **HEAT:** Activates the heating system.
- **COOL:** Activates the cooling system.

Slide the top control to your desired operating mode (HEAT or COOL) or to OFF when the system is not needed.

4.2 Setting the Temperature (Bottom Slider)

The bottom slider allows you to set your desired room temperature.

- Slide the bottom control to the left to decrease the temperature setting.
- Slide the bottom control to the right to increase the temperature setting.

The thermostat will automatically turn your heating or cooling system on or off to maintain the set temperature.

5. MAINTENANCE

The White Rodgers M100 thermostat requires minimal maintenance to ensure optimal performance.

- **Cleaning:** Periodically wipe the exterior of the thermostat with a soft, damp cloth. Do not use abrasive cleaners or solvents.
- **Airflow:** Ensure that the thermostat is not obstructed by furniture, curtains, or other objects that could block airflow and affect its ability to sense room temperature accurately.
- **Annual Check:** It is recommended to have your entire HVAC system, including the thermostat, inspected annually by a qualified technician.

6. TROUBLESHOOTING

If you experience issues with your White Rodgers M100 thermostat, refer to the following common troubleshooting steps:

- **System Not Responding (No Heat/Cool):**
 - Check if the system mode slider is set to HEAT or COOL, not OFF.
 - Verify that the temperature setting is above (for heat) or below (for cool) the current room temperature.
 - Ensure the power to your HVAC system is ON at the main fuse or circuit breaker.
 - Check for tripped circuit breakers or blown fuses related to your HVAC system.
- **Inaccurate Temperature Reading:**

- Ensure the thermostat is not exposed to direct sunlight, drafts from windows, or heat sources (e.g., lamps, appliances).
- Verify that there are no obstructions blocking airflow around the thermostat.
- **Thermostat Does Not Turn On/Off:**
 - Confirm all wiring connections are secure and correctly matched to the terminals.
 - If the issue persists, professional assistance may be required to diagnose electrical or component failures.

If these steps do not resolve the issue, contact a qualified HVAC technician for further assistance.

7. SPECIFICATIONS

Feature	Specification
Model Number	M100
Brand	White-Rodgers
Thermostat Type	Mechanical, Non-Programmable
System Compatibility	Single-stage Heat & Cool, 24-volt and Millivolt systems
Temperature Range	50°F to 90°F (10°C to 32°C)
Voltage	24 Volts
Color	White
Dimensions	12 x 7 x 8.8 inches
Item Weight	3 Pounds
Special Features	Mercury Free, Portable

8. WARRANTY INFORMATION

Specific warranty details for the White Rodgers M100 thermostat are not provided in the available product information. For warranty inquiries, please refer to the documentation included with your purchase or contact White-Rodgers customer support directly.

9. CUSTOMER SUPPORT

For technical assistance, troubleshooting beyond this manual, or warranty claims, please contact White-Rodgers customer support. Contact information can typically be found on the product packaging, the official White-Rodgers website, or by searching for "White-Rodgers customer support" online.

You can also visit the [White-Rodgers Store on Amazon](#) for more product information.