

# Robertshaw®

# 9615

DIGITAL  
PROGRAMMABLE  
THERMOSTAT

INTEGRATED COMFORT SOLUTIONS™



ELECTRIC



GAS

**7 Day Programmable  
2 Heat / 2 Cool**

## User's Manual

### Quick Start

### Installation and Programming



**110-737**

As an Energy Star partner, Maple Chase has determined that this thermostat product meets the Energy Star guidelines for energy efficiency.



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## Important Safety Information Warning:

- Always turn off power at the main power source by unscrewing fuse or switching circuit breaker to the off position before installing, removing, cleaning or servicing thermostat.
- Read all of the information in this manual before installing or programming this thermostat.
- This is a 24V AC low-voltage thermostat. Do not install on voltages higher than 30V AC.
- All wiring must conform to local and national building and electrical codes and ordinances.
- Do not short (jumper) across terminals on the gas valve or at the system control to test installation. This will damage the thermostat and void the warranty.

# Features

- Four pre-programmed Energy Star setpoints for each day of the week
- Quickset™ programming for quickly programming all days of the week simultaneously
- Energy Efficient Recovery (EER™)
- Residual cooling for added air-conditioning efficiency
- Two “AA” ENERGIZER brand batteries retain program memory, even during power outages
- Low battery indicator
- LED indicator for auxiliary system operation
- Zone compatible as master thermostat
- Fahrenheit/Celsius display option
- Programmable from 45°F (7°C) to 90°F (32°C)
- Accuracy within ±1 degrees
- Adjustable 1st and 2nd stage differential: 1-3 degrees, 1st stage: 2-6 degrees, 2nd stage
- Maintains summer and winter programming

## Replacing Existing Thermostat

1. Turn off power to heating and cooling system.
2. Remove cover of old thermostat to expose wires. Do not disconnect wires. (Fig. 1)
3. Label wires per Table 1.

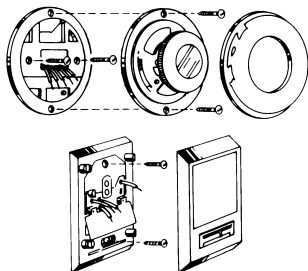
**TABLE 1**

<b>Old Label</b>	<b>New Label</b>	<b>Description</b>
R, V-VR or VR-R	R	24 VAC
Y, Y1 or M	Y1	1st Stage Cooling Circuit
O or R	O	Reversing Valve (Cooling Mode)
B	B	Reversing Valve (Heating Mode)
G or F	G	Fan Contactor Circuit
Y2	Y2	2nd Stage Cooling Circuit
W2 or W-U	W2	2nd Stage Heating Circuit
W1	W1	1st Stage Heating Circuit
C, X or B	C	24 VAC, Transformer Common Side

**NOTE:** THIS THERMOSTAT REQUIRES A 24V AC COMMON WIRE FOR PROPER OPERATION.

4. After labeling wires, remove wires from terminals.
5. Remove existing thermostat base from wall.
6. Refer to the following section for instructions on how to install thermostat.

FIGURE 1

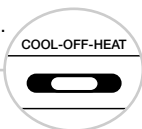
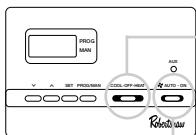



## Installing Item 9615 Thermostat

**NOTE:** For new installations, MOUNT THERMOSTAT ON INSIDE WALL, 4-5 FEET ABOVE THE FLOOR. Do NOT INSTALL BEHIND A DOOR, IN A CORNER, NEAR AIR VENTS, IN DIRECT SUNLIGHT, OR NEAR ANY HEAT OR STEAM GENERATING FIXTURES. INSTALLATION AT THESE PLACES WILL AFFECT THERMOSTAT OPERATION.

**IMPORTANT:** THIS THERMOSTAT IS COMPATIBLE WITH 100% LOCKOUT SYSTEMS. To RESET THE SYSTEM, TURN THERMOSTAT TO OFF POSITION FOR AT LEAST 60 SECONDS.

1. Turn power off to the heating and cooling systems.
2. Place COOL-OFF-HEAT switch in OFF position.



3. Place  AUTO-ON switch into AUTO position.
4. Remove the cover using a coin or screwdriver.

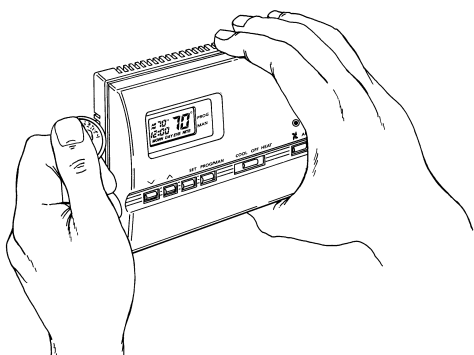
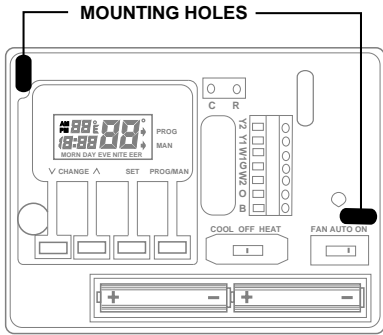


FIGURE 2

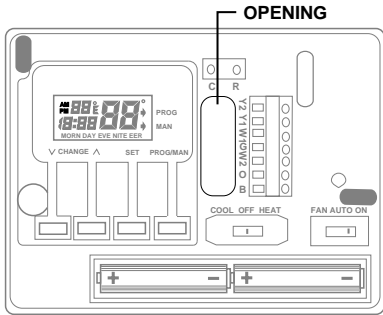
5. Place thermostat against the wall at desired location. Make sure wires will feed through opening on base of thermostat.
6. Mark placement of mounting holes. See Fig. 3. Set base aside.

**FIGURE 3**

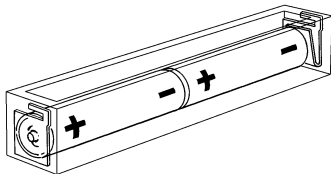


7. Drill the marked holes using a 3/16" drill bit. **NOTE: Enclosed plastic anchors do not require a drilled hole for drywall.**
8. Tap plastic anchors into the holes.
9. Align base with plastic anchors and feed wires through opening. See Fig 4.

**FIGURE 4**



10. Secure base to wall with supplied screws.
11. Connect wires to terminal strip. Refer to wiring diagrams on other side of this sheet. Make sure wire connections are secure.
12. Install two "AA" ENERGIZER brand batteries or equivalent into battery compartment. Be sure to match positive (+) ends of batteries with positive (+) battery terminals in the battery compartment.

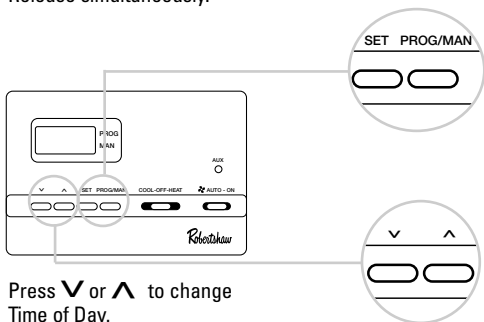


13. Replace cover onto thermostat by snapping into place.
14. Turn on power to system. Test thermostat as described in the following section.

# Programming Guide

## Set Time of Day, Day of Week, Temperature Differential, Residual Cooling

1. Press SET & PROG/MAN.  
Release simultaneously.



2. Press



- Press



To Change Day of Week

1=M0
2=TU
3=WE
4=TH
5=FR
6=SA
7=SU

3. Press



- Press



To change 1st Stage Temperature Differential

**NOTE:** THE TEMPERATURE DIFFERENTIAL IS FACTORY PRESET AT 1°. THIS MEANS THAT WHENEVER THE ROOM TEMPERATURE CHANGES BY ONE FULL DEGREE FROM THE TEMPERATURE SETTING, THE SYSTEM WILL TURN ON. IF THE SYSTEM TURNS ON TOO OFTEN, INCREASE THE TEMPERATURE DIFFERENTIAL.

4. Press

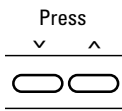
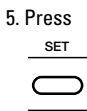


- Press



To change 2nd Stage Temperature Differential

**NOTE:** SECOND STAGE DIFFERENTIAL IS FACTORY PRESET AT 2°.



To change  
Residual Cooling

NOTE: THE RESIDUAL COOL FEATURE WILL KEEP THE SYSTEM FAN ON FOR AN ADDITIONAL 30, 60 OR 90 SECONDS AFTER THE COMPRESSOR CYCLES OFF. THE RESIDUAL COOL FEATURE CAN ONLY BE SET IN THE COOL MODE.

## Changing Fahrenheit (F) to Celsius (C)

Press and Hold SET

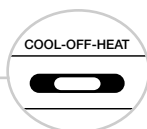
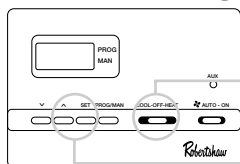


Press



Release both simultaneously.

## QuickSet™ Programming Mode



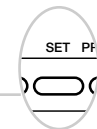
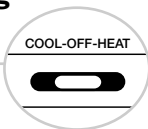
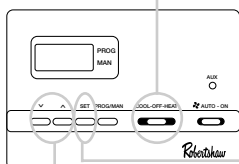
1. Place COOL-OFF-HEAT in COOL or HEAT position.
2. Press & Hold SET. Press the ▲ button. Release simultaneously.
3. The MORN indicator should be blinking. Program the Time-of-Day and the temperature as outlined in the Setting Daily Program section.



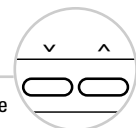
NOTE: QuickSet™ will program all 7 days of the week with the same program.

## Setting Daily Programming

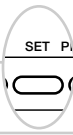
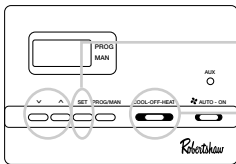
1. Place COOL-OFF-HEAT in COOL position.



2. Press SET button. The display will show a number from 1 to 7. This number represents the day of the week to be programmed. If programming individual days, press either ▼ or ▲ button to adjust the day of the week to program.
3. Press SET. Press ▼ or ▲ to change MORN time



4. Press SET.



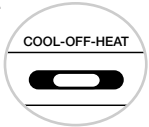
5. Press  $\nabla$  or  $\blacktriangle$  to change MORN temperature.



6. Repeat Steps 2-5 for DAY, EVE, and NITE.

7. Repeat steps 2-6 above to program any other day of the week.

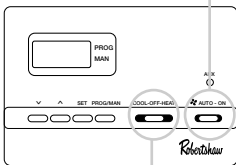
8. Shift COOL-OFF-HEAT to HEAT position.



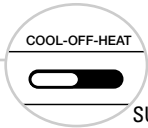
9. Repeat steps 2-6 to program HEAT (winter) settings.

## Begin Programmed Operation

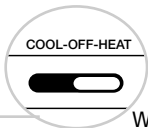
1. Place  AUTO/ON into AUTO.



2. Place COOL-OFF-HEAT into COOL or HEAT Depending upon the season.

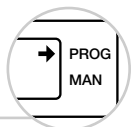
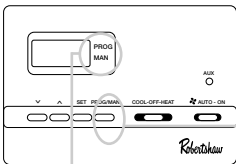


SUMMER



WINTER

3. Press PROG/MAN button until indicator is in PROG position.



**NOTE:** WHILE IN THE COOL MODE ONCE THE THERMOSTAT TURNS THE SYSTEM OFF, A BUILT-IN DELAY KEEPS THE COMPRESSOR FROM TURNING ON FOR ABOUT 5 MINUTES. THIS PROTECTS THE COMPRESSOR. NO ADDITIONAL TIME DELAY RELAY (DELAY ON BREAK) IS NECESSARY. TO OVERRIDE THE 5-MINUTE DELAY FOR INSTALLATION, PRESS RESET. THIS WILL ERASE THE DELAY AS WELL AS ALL PROGRAMMING.

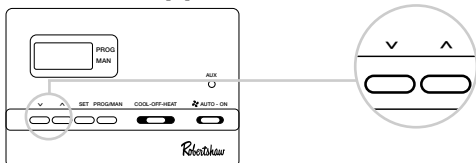
## Energy Efficient Recovery EER™

EER™ allows your system to operate at peak efficiency for optimal energy savings. EER™ looks up to 2 hours prior to the end of a set-back period to begin monitoring system performance and determine the most efficient time to turn on your system. During this period, the auxiliary stages of heating or cooling will be locked out. Only the most efficient stages will be utilized. At 20 minutes prior to the upcoming setpoint time, the auxiliary stages will be available to achieve temperature setpoint if required.

## Temporary Program Override

To temporarily increase or decrease temperature

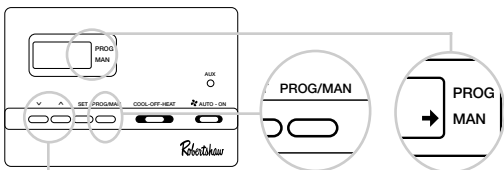
Press **∨** or **∧**



The Thermostat will automatically return to the program at the next scheduled setting change or after 4 hours.

## Manual Operation

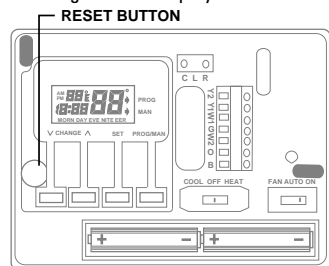
1. Press PROG/MAN until indicator is in MAN position.



2. Press **∨** or **∧** to adjust temperature settings.

## Reset

To Reset the thermostat to factory pre-programmed conditions, press the reset button located directly to the right of the display.



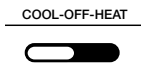


# To Test Thermostat

**WARNING:** DO NOT SHORT (JUMPER) ACROSS TERMINALS OF GAS VALVE OR SYSTEM CONTROL TO TEST OPERATION. THIS WILL DAMAGE THE THERMOSTAT AND VOID YOUR WARRANTY.

**CAUTION:** Do NOT SWITCH SYSTEM TO COOL IF THE TEMPERATURE IS BELOW 50°F (10°C). THIS CAN DAMAGE THE AIR CONDITIONING SYSTEM AND CAUSE PERSONAL INJURY.

1. Place the COOL-OFF-HEAT switch into the COOL position.



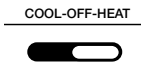
2. Press the **▼** button until the temperature setting is at least 3 degrees below the room temperature. The air conditioning system should turn on within a few seconds.

**NOTE:** WHILE IN THE COOL MODE ONCE THE THERMOSTAT TURNS THE SYSTEM OFF, A BUILT-IN DELAY KEEPS THE COMPRESSOR FROM TURNING ON FOR ABOUT 5 MINUTES. THIS PROTECTS THE COMPRESSOR. NO ADDITIONAL TIME DELAY RELAY (DELAY ON BREAK) IS NECESSARY. TO OVERRIDE THE 5-MINUTE DELAY FOR INSTALLATION, PRESS RESET. THIS WILL ERASE THE DELAY AS WELL AS ALL PROGRAMMING.

3. Put the COOL-OFF-HEAT switch into the OFF position. The air conditioning system should turn off. The fan may continue to run for a short period of time.

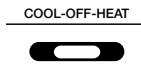


4. Put the COOL-OFF-HEAT switch into the HEAT position.



5. Press the **▲** button until the temperature setting is at least 3 degrees above room temperature. The heating system should turn on. The fan may not turn on immediately, depending upon the fan delay built into the furnace.

6. Put the COOL-OFF-HEAT switch into the OFF position. The heating system should turn off. Once again, the fan may have a delay.



7. Put the **☼** AUTO-ON switch to the ON position. The blower fan should turn on.



8. Put the **☼** AUTO-ON switch to the AUTO position. The blower fan should turn off.



## LED Indicator

The LED indicator illuminates during a call for second stage heating or cooling. The auxiliary stages are used to maintain comfort during extremes in weather conditions. If the LED is illuminated too frequently during periods of moderate temperature, check the differential settings (page 5).

# Troubleshooting

SYMPTOM	REMEDY
Thermostat does not turn on system.	Check Wiring. (See "INSTALLATION.")  Check fuse. Replace with 3 amp fuse if fuse has opened. Five minute compressor short cycle protection may be in effect. Press RESET to override. NOTE: This will erase programming.
Thermostat turns on and off too frequently.	Increase Temperature Differential (See "PROGRAMMING.")
Display is blank, flashing or constant "LO BAT".	Replace batteries.
System fan does not operate properly.	Move fan option switch to either gas or electric, to match system. (See "INSTALLATION.")
Time shown on display is not the current time of day.	Change time of day setting. (See "PROGRAMMING.")
Thermostat does not follow program.	Thermostat in MANUAL mode. (See "PROGRAMMING.")  Thermostat may not have been programmed in HEAT or COOL position. Verify program.  Check AM/PM indicators at time of day and programmed time changes. (See "PROGRAMMING.")  Verify program and day of week are correct. (See "PROGRAMMING.")
Thermostat does not advance day of week.	To view or change day of week, use method on page 5.

**If problems with thermostats cannot be solved, call:**

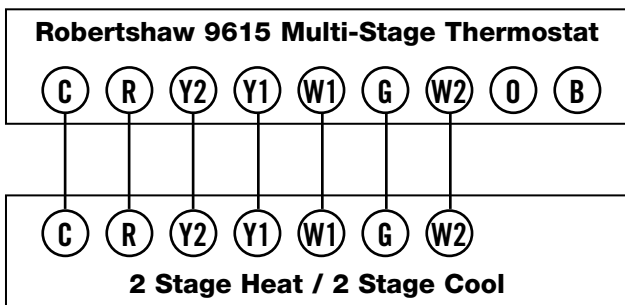
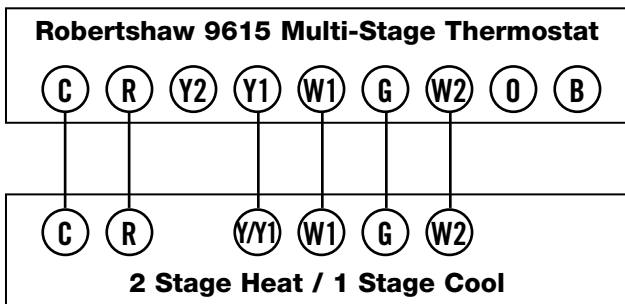
Technical Support: (800) 445-8299  
Monday-Friday 7:30-5:30 CST

For warranty returns, send thermostat, shipping prepaid to:

**Uni-Line North America**  
Warranty Claims Department  
515 S. Promenade  
Corona, CA 91719

## Wiring Diagrams

The following is just a sample of the most common types of HVAC systems. Refer to your system's installation manual for wiring information.



## Five-Year Limited Warranty

**Maple Chase Company** warrants to the original contractor installer, or to the original consumer user, each new Robertshaw thermostat to be free from defects in materials and workmanship under normal use and service for a period of five (5) years from date of purchase. This warranty does not cover batteries, damage caused by batteries, damage resulting from improper installation, alteration, misuse or abuse of the thermostat occurring after the date of purchase.

**Maple Chase Company** agrees to repair or replace at its option any thermostat under warranty provided it is returned within the warranty period, postage prepaid, with proof of the date of purchase. Cost of thermostat removal or reinstallation is not the responsibility of Maple Chase Company.

Repair or replacement as provided under this warranty is the exclusive remedy of the consumer. **Maple Chase Company** shall not be liable for any incidental or consequential damages for breach of any express or implied warranty on this product, or under any other theory of liability. Except to the extent prohibited by applicable law, any implied warranty of merchantability or fitness for a particular purpose on this product is limited to the duration of this warranty.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.