

Robertshaw[®]
RS9110

Operation Manual



RS9110

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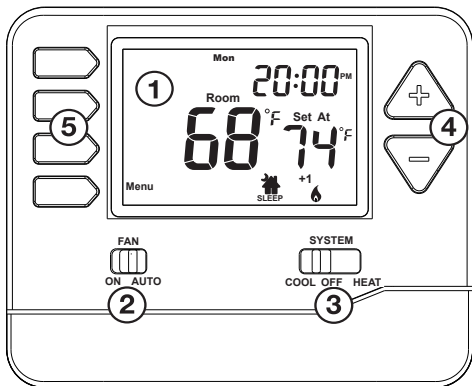
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Caution

Equipment damage hazard.
Do not operate the cooling system if the outdoor temperature is below 50°F (10°C) to prevent possible compressor damage.

THERMOSTAT OPERATION



① LCD Screen

② Fan Switch

③ System Switch

④ Temperature Setpoint Buttons


⑤ User Buttons

THERMOSTAT OPERATION

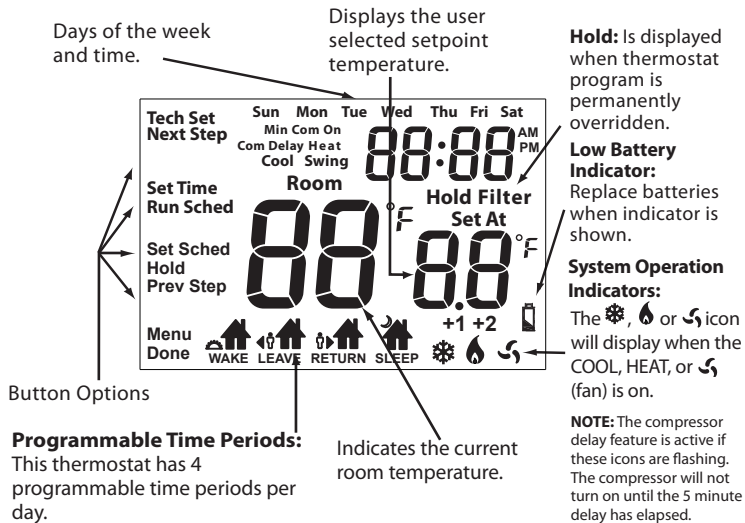
- 1 LCD Screen**
See page 4 for details about this display readout.
- 2 Fan Switch**
Select **ON** or **AUTO**. **ON** will run the fan continuously. **AUTO** will cycle the fan on only when the heating or cooling system is running.
- 3 System Switch**
Select the operation mode on your HVAC system. Selecting **HEAT** turns on the heat mode. Selecting **COOL** turns on the air conditioning mode.
- Selecting **OFF** turns both heating and cooling off.
- 4 Temperature Setpoint Buttons**
Press the + or - buttons to select the desired room temperature.
- 5 User Buttons**
Use these buttons to set up your programming options. Refer to the next page for detail.



Caution:

When the battery icon  appears replace your AAA batteries immediately. Failure to do so may result in your heating and cooling system becoming inoperable. Freezing or over heating can occur.

THERMOSTAT QUICK REFERENCE



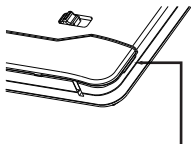
THERMOSTAT QUICK REFERENCE



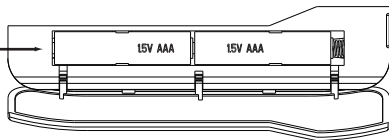
Important:

The low battery indicator is displayed when the 2x AAA batteries need to be replaced.

Battery Door Information





Replace with 2x AAA Alkaline Batteries. High quality Alkaline batteries are recommended.





Use the finger bevel on the lower portion of the thermostat to open the easy access battery door.

THERMOSTAT QUICK REFERENCE

Temporary and Permanent Hold Feature (if using programming)

Temporary Hold: The thermostat will display **HOLD** and **RUNSCHED** on the left of your screen when you press the  or  key. If you do nothing, the temperature will remain at this setpoint until next time period. Your program setpoint will then replace your temporary setpoint.

Permanent Hold: If you press the **HOLD** key at the left of your screen, you will see **HOLD** appear below the setpoint temperature in the display. The thermostat will now permanently stay at this setpoint and can be adjusted using the  or  keys.

To return to program: Press the **RUN SCHED** key at the left of your screen to exit either temporary or permanent hold.

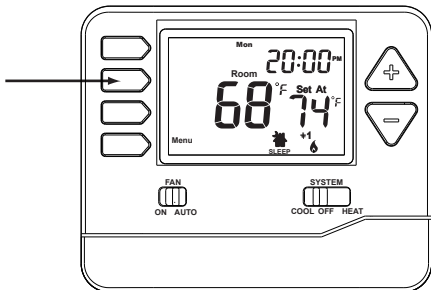
THERMOSTAT QUICK REFERENCE

Filter Change Reminder

If your HVAC contractor has configured the thermostat to remind you when the air filter needs to be changed, you will see **FILTER** in the display when your air filter needs to be changed.







Resetting the filter change reminder: When **FILTER** reminder is displayed, you should change your air filter and reset the reminder by holding down the second button from the top left side of the thermostat for 3 seconds.

Hold down 3 seconds to reset filter reminder.







PROGRAMMING

Set Time

1. Press the **MENU** button.
2. Press **SET TIME**.
3. Day of the week will be flashing. Use the  or  key to select the current day of the week.
4. Press **NEXT STEP**.
5. The current hour is flashing. Use the  or  key to select the current hour. When using 12-hour time, make sure the correct a.m. or p.m. choice is selected.
6. Press **NEXT STEP**.
7. Minutes are now flashing. Use the  or  key to select current minutes.
8. Press **DONE** when completed.

Set Program Schedule 5+1+1 or 7 Day

To customize your program schedule, follow these steps:

1. Select **HEAT** or **COOL** with the system switch. **Note:** You have to program heat and cool separately.
2. Press the **MENU** button (If menu does not appear first press **RUN SCHED**).
3. Press **SET SCHED**. Note: **Monday-Friday** (or **Monday** if in 7 Day) is displayed and the **WAKE** icon is shown. You are now programming the wake time period for that day.
4. Time is flashing. Use the  or  key to make your time selection for that day's **WAKE** time period.
5. Press **NEXT STEP**.
6. The setpoint temperature is flashing. Use the  or  key to make your setpoint selection for that day's **WAKE** time period.
7. Press **NEXT STEP**.
8. Repeat steps 4 thru 7 for that day's **LEAVE** time period, **RETURN** time period, and **SLEEP** time period.

Continued on next page...

PROGRAMMING

Set Program Schedule 5+1+1 or 7 Day

Saturday:

Repeat steps 4 through 7 for the Saturday **WAKE** time period, **LEAVE** time period, **RETURN** time period, and for the Saturday **SLEEP** time period.

Sunday:

Repeat steps 4 through 7 for the Sunday **WAKE** time period, **LEAVE** time period, **RETURN** time period, and for the Sunday **SLEEP** time period.

TECHNICIAN SETUP MENU

1. Press **MENU** button.
2. Press and hold **TECH SET** button for 3 seconds.
3. Configure the installer options as desired using the table on page 12.
4. Use the + OR - keys to change settings and the **NEXT STEP** or **PREV STEP** key to move from one option to another.

Note: Only press **DONE** key when you want to exit the Technician Setup Options.






TECHNICIAN SETUP MENU

| Tech Settings | LCD Will Show Adjustment Options | Default |
|--|---|-------------------|
| <p>Filter Change Reminder</p> <p>This feature will flash FILT in the display after the elapsed run time to remind the user to change the filter. A setting of OFF will disable this feature.</p> | <p>Next step OFF</p> <p>Prev step FL SE</p> | <p>OFF</p> |
| <p>Room Temperature Calibration</p> <p>This feature allows the installer to change the calibration of the room temperature display. For example, if the thermostat reads 70° and you would like it to read 72° then select +2.</p> | <p>Next step [AL</p> <p>Prev step 0°F</p> | <p>0</p> |
| <p>Minimum Compressor On Time</p> <p>This feature allows the installer to select the minimum run time for the compressor. For example: A setting of 4 will force the compressor to run for at least 4 minutes every time the compressor turns on, regardless of the room temperature.</p> | <p>Next step OFF</p> <p>Prev step AN ON</p> | <p>OFF</p> |

TECHNICIAN SETUP MENU

| Tech Settings | LCD Will Show Adjustment Options | Default |
|--|--|-------------------|
| <p>Compressor Short Cycle Delay</p> <p>The compressor short cycle delay protects the compressor from short cycling. This feature will not allow the compressor to be turned on for 5 minutes after it was last turned off.</p> | <p>Next step ON</p> <p>CO OF</p> <p>Prev step</p> | <p>ON</p> |
| <p>Cooling Differential or Swing</p> <p>The differential setting, often called cycle rate or anticipation, is adjustable. A smaller differential setting will cause more frequent cycles and a larger differential setting will cause fewer cycles.</p> | <p>Next step dF CO</p> <p>0.5 °F</p> <p>Prev step</p> | <p>0.5</p> |
| <p>Heating Differential or Swing</p> <p>The differential setting, often called cycle rate or anticipation, is adjustable. A smaller differential setting will cause more frequent cycles and a larger differential setting will cause fewer cycles.</p> | <p>Next step dF HE</p> <p>0.4 °F</p> <p>Prev step</p> | <p>0.4</p> |

TECHNICIAN SETUP MENU

| Tech Settings | LCD Will Show Adjustment Options | Default |
|--------------------------------|--|------------|
| <p>For C</p> | <p>Select F for Fahrenheit temperature readout or select C for Celsius readout.</p> <p>Next step <i>oF</i>  Prev step</p> <p>F for Fahrenheit C for Celsius</p> | <p>F</p> |
| <p>12 or 24 Hour Clock</p> | <p>You can select either a 12 or 24 hour clock setting.</p> <p>Next step  Prev step</p> <p>Use the  and  to select 12 or 24 hour clock.</p> | <p>12</p> |
| <p>Fan Operation</p> | <p>Select GAS for systems that control the fan during a call for heat. Select ELEC to have the thermostat control the fan during a call for heat.</p> <p>Next step  Prev step</p> <p>GAS - GS or ELEC - EL</p> | <p>GAS</p> |

TECHNICIAN SETUP MENU

Tech Settings

Program Options

You can configure this thermostat to have 7 Day, 5+1+1 programming or non-programmable.

Note: If 7d is selected, in set schedule you will program all seven days individually.

If 5d is selected, in set schedule you will program Monday - Friday together and Saturday and Sunday individually.

If 0d is selected the thermostat becomes non-programmable and the Set Schedule button goes away in Menu.

LCD Will Show Adjustment Options

Next step
Pr 00

5d

Prev step

Use the $\boxed{+}$ and $\boxed{-}$ key to select **7d** for 7 Day, **5d** for 5+1+1, or **0d** for non-programmable.

Default

5d

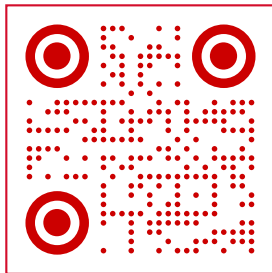
TERMINAL DESIGNATIONS

| | |
|----------|------------------------------------|
| RH | 24VAC Heating |
| RC | 24VAC Cooling |
| C | Common 24VAC (system power supply) |
| W | HEAT |
| Y | COOL |
| G | FAN |
| B | REV VALVE HEAT |
| O | Cooling Activated Reversing Valve |





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