

Robertshaw®

# RS8110

Operation Manual



## Table of Contents

## Page

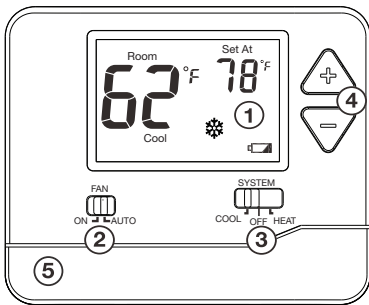
Table of Contents	1
Thermostat Operation	2-3
Thermostat Quick Reference	4-6
Adjusting the Temperature	
Differential/Swing	7
Calibration Setting	8
Terminal Designations	9



## 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.

## THERMOSTAT OPERATION



- 1 LCD Display
- 2 Fan Switch
- 3 System Switch
- 4 Temperature Set-Point Buttons
- 5 Easy change battery door

### 1 LCD Screen

See page 6 for detailed information.

### 2 Fan Switch

Select **ON** or **AUTO**. **ON** will run the fan continuously. **AUTO** will turn the fan on only in a call for heating or cooling.

### 3 System Switch

Select **HEAT** or **COOL** for your HVAC system. Selecting **HEAT** turns on the heat mode. Selecting **COOL** turns on the cool mode. Selecting **OFF** turns both heating and cooling off.

### 4 Temperature Set-Point Buttons

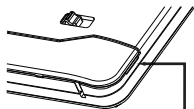
Press the  $\Delta$  or  $\nabla$  to select the desired temperature.

### 5 Easy change battery door

See page 4 for details.

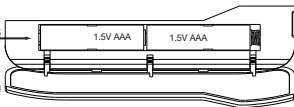
# THERMOSTAT QUICK REFERENCE

## Battery Door Information




Press the lower portion of the thermostat to open the easy access battery door.

Install two AAA Alkaline batteries into battery compartment. Be sure to match positive (+) ends of batteries with positive (+) battery terminals in the battery compartment.





### Caution:

When the low battery icon  appears replace your 2x AAA batteries immediately. Failure to do so may result in your heating and cooling system becoming inoperable. Freezing or overheating can occur.

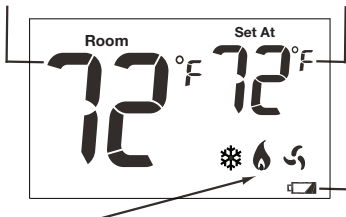
# THERMOSTAT QUICK REFERENCE

## Room Temperature:

Indicates the current room temperature.

## Set-Point Temperature:

Displays the user selected set-point temperature.



## System Operation Indicators:

The ,   
or  icon will display  
when the **COOL**, **HEAT**  
or **FAN** is on.

**NOTE:** If these icons  
are flashing, there is  
a 5-minute delay for  
compressor protection.

## Low Battery Indicator:

Replace batteries  
when indicator is  
shown.



## ADJUSTING THE TEMPERATURE DIFFERENTIAL

### COOLING DIFFERENTIAL OR SWING.

The cooling differential is factory preset at 0.5°. This means that whenever the room temperature heats by 0.5° from the temperature setting, the cooling system will turn on. If the cooling system turns on too often, increase the temperature differential. To access the COOL SWING setting and adjust the cooling differential, select **COOL** and hold down  $\Delta$  and  $\nabla$  together for 3 seconds. Use  $\Delta$  and  $\nabla$  to adjust the cooling differential from between 0.2°F and 2°F. Wait approximately 15 seconds or toggle the system switch to return to normal operation.

### HEATING DIFFERENTIAL OR SWING.

The heating differential is factory preset at 0.4°. This means that whenever the room temperature cools by 0.4° from the temperature setting, the heating system will turn on. If the heating system turns on too often, increase the temperature differential. To access the HEAT SWING setting and adjust the heating differential, select **HEAT** and hold down  $\Delta$  and  $\nabla$  together for 3 seconds. Use  $\Delta$  and  $\nabla$  to adjust the heating differential from between 0.2°F and 2°F. Wait approximately 15 seconds or toggle the system switch to return to normal operation.

## CALIBRATION SETTING

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To access the CALIBRATION setting and adjust the temperature, select **OFF** and hold down  $\Delta$  and  $\nabla$  together for 3 seconds. Use  $\Delta$  and  $\nabla$  to adjust the temperature from between  $-4^{\circ}\text{F}$  and  $+4^{\circ}\text{F}$ .

Press  $\nabla$  to select F (Fahrenheit) or C (Celsius), and press  $\Delta$  to select the temperature scale.

Then press  $\nabla$  to access the compressor short cycle DELAY setting. If the compressor short cycle delay setting is **ON**, the compressor cannot be turned on for at least 3 minutes after it was last turned off. Use  $\Delta$  and  $\nabla$  to adjust the compressor short cycle delay setting to **ON** or **OFF**. Wait approximately 15 seconds or toggle the system switch to return to normal operation.

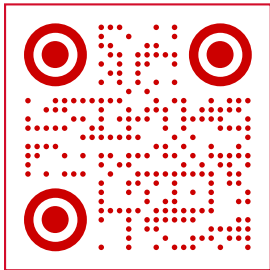
## TERMINAL DESIGNATIONS

RH ..... 24 VAC (system power supply) HEAT  
RC ..... 24 VAC (system power supply) COOL  
C ..... Common 24 VAC (system power supply)  
W ..... HEAT  
Y ..... COOL  
G ..... FAN  
B ..... REV VALVE HEAT  
O ..... REV VALVE COOL



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