



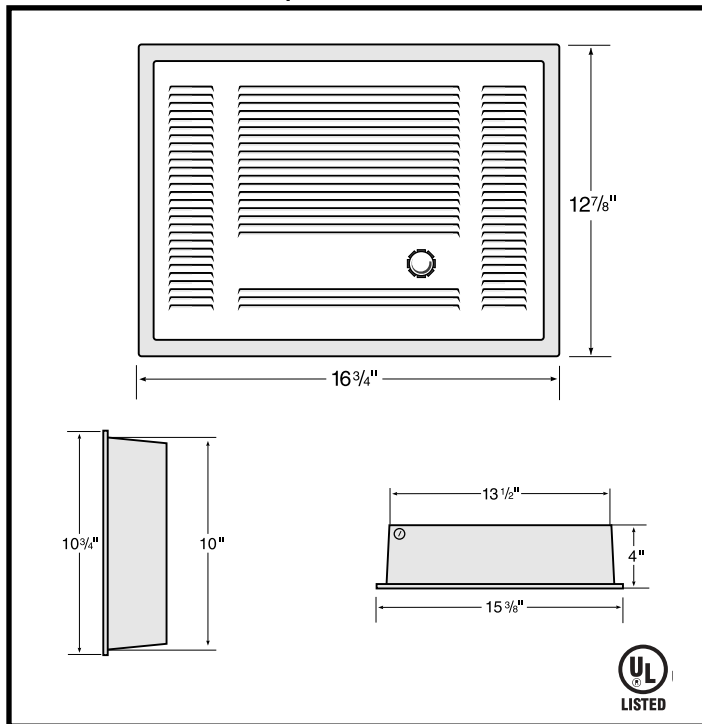
<b>Tools Required:</b>	<b>Utility Knife</b>
Phillips Screwdriver	4 1/2" Wood Screws
Wire Strippers	3 Insulated Wire Connectors
Pliers	1 Strain Relief Connector

**SAFETY & QUALITY**

# The SL Series

## OWNER'S GUIDE

### Wall Can Required For New Installation



### Features & Benefits

- Commercial grade high temperature manual reset with 25 amp rating at 240 volt
- Grill design provides even air distribution
- Quiet operation
- Built-in double pole thermostat
- Powder coat paint process eliminates sharp metal edges
- Two year extended warranty

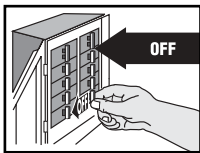
### Models:

SL152TW SL151TW  
SL192TW SL208TW  
SL252TW SL258TW  
SL302TW SL308TW  
SL101TW

### New installation

requires wall can  
(sold separately):  
SLC Recess Mount  
SLC-S Surface Mount

## General Safety Information



### ⚠ WARNING

Turn the electrical power off at the electrical panel board (circuit breaker or fuse box) and lock or tag the panel board door to prevent someone from turning on power while you are working on the heater. Failure to do so could result in serious electrical shock, burns, or possible death.

1. Read all information labels. Verify that the electrical supply wires are the same voltage as the heater.
2. All electrical work and materials must comply with the National Electric Code (NEC), the Occupational Safety and Health Act (OSHA), and all state and local codes.
3. The heater must be grounded to the grounding pigtail (copper wire) provided in the wall can.
4. If you need to install a new circuit or need additional wiring information, consult a qualified electrician.

5. Protect electrical supply from kinks, sharp objects, oil, grease, hot surfaces or chemicals.

### ⚠ WARNING

DO NOT install the heater in a floor or behind doors. Overheating or fire may occur.

### ⚠ WARNING

DO NOT install heater in any area where combustible vapors, gases, liquids, or excessive lint or dust are present. Fire or explosion may occur.

### ⚠ WARNING

**Risk of Electrical Shock.** Connect grounding lead to grounding wire provided. Keep all foreign objects out of heater.

### ⚠ WARNING

**Risk of Fire.** Heater must be kept clear of all obstructions: a minimum of 3 feet in front, 6 inches above and on both sides. Heaters must be kept clean of lint, dirt and debris (See Maintenance Instructions).

## Keep For Future Reference

TEL: 360-693-2505 FAX: 360-694-8668 P.O. Box 1675 Vancouver, WA 98668-1675

# READ ALL INSTRUCTIONS AND SAFETY INFORMATION

**IMPORTANT!** It is extremely important you verify that the electrical supply wires are the same voltage as the heater (i.e. 120 volt heater to 120 volt power supply and 240 volt heater to 240 volt power supply). If replacing an existing heater, check the labels of the old heater and replace using the same voltage. Hooking a 240 volt heater to a 120 volt power supply will drastically reduce the heater's output. Hooking a 120 volt heater to a 240 volt power supply will destroy the heater. Connecting your heater to an incompatible power supply will void the warranty.

## Installation Instructions

### Part One

**PLACEMENT:** For best results install The SL heater on an inside wall. Headers and bracing are not necessary. **NOTE:** The wall can must be installed in the TOP UP (horizontal) position only.

**THERMOSTAT:** A built-in thermostat is included

#### How do I install for new construction?

##### STEP 1 Mount The Wall Can

The SL series REQUIRES a minimum distance of 6 inches from adjacent surfaces and 6 inches from the floor. However, Cadet RECOMMENDS 12 inches from all adjacent surfaces and 12 inches from the floor for longer and cleaner performance. Heaters must be spaced at least 3 feet apart. Secure the wall can to the studs and/or sill plate with screws through the larger ( $\frac{3}{16}$  inch) holes.

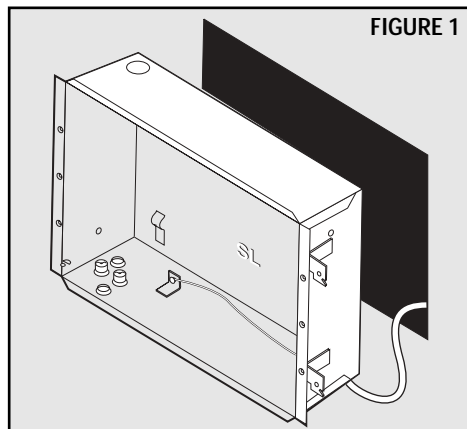


FIGURE 1

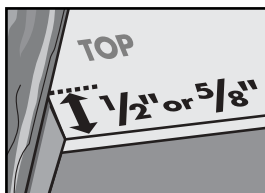


FIGURE 2  
Face of wall can must extend  $\frac{1}{2}$  inch from face of stud to allow for sheetrock.

##### STEP 2 Connect Supply Wires

Route supply wire from circuit breaker to heater. Remove a knockout and attach the supply wire with a strain relief connector leaving 6 inches of wire lead for later use. Connect supply ground wire to grounding screw in wall can (See Figure 3). Proceed to PART TWO.

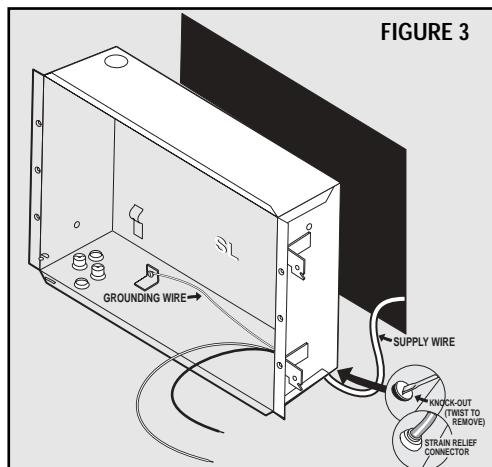


FIGURE 3

#### How do I install in an existing wall?

##### STEP 1 Cut Hole In Wall

Cut a hole  $14\frac{1}{8}$  inches wide by 10 inches high next to wall stud. The SL series REQUIRES a minimum distance of 6 inches from adjacent surfaces and 6 inches from the floor. However, Cadet RECOMMENDS 12 inches from all adjacent surfaces and 12 inches from the floor (See Figure 4) for longer and cleaner performance. Heaters must be spaced at least 3 feet apart.

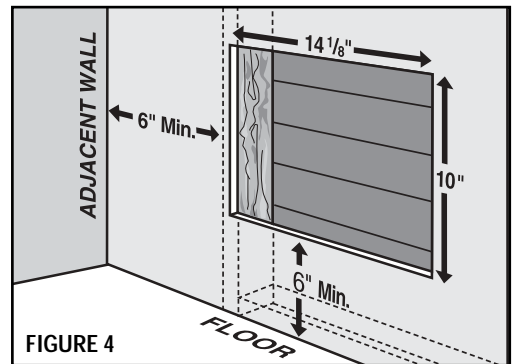


FIGURE 4

##### STEP 2 Route Supply Wires

Route supply wire from circuit breaker to wall can. Remove a knockout and attach the supply wire with a strain relief connector, leaving 6 inches of wire lead for later use (See Figure 3).

##### STEP 3 Mount The Wall Can

Insert wall can into opening. Keeping front of wall can flush with wall, secure to wall stud with screws.

**IMPORTANT:** Insert two screws into the small holes opposite the wall stud to rest against back-side of sheetrock (keeping wall can flush to wall).

##### STEP 4 Connect Supply Wires

Connect supply ground wire to grounding screw in wall can (See Figure 3). Proceed to PART TWO.

# Installation Instructions

## Part Two

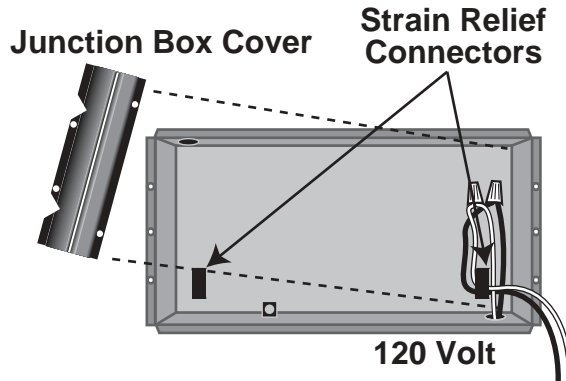
*How do I insert the heater assembly into the wall can?*

### STEP 1 Wire

- Insert the two heater wires under the appropriate strain relief clip.
- Connect the heater wires to the supply wires using electrical insulated wire connectors.

**IMPORTANT:** On 120 volt heaters, the white heater wire must connect to the white supply wire.

- Install the junction box cover so that the wire connections are located between the cover and wall can.



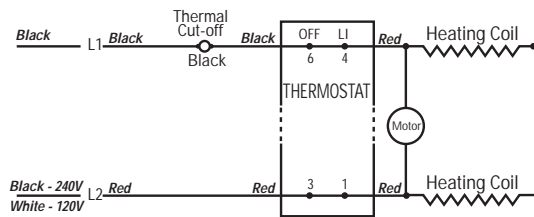
### STEP 2 Heater Assembly

Place heater assembly inside wall can and secure with screws.

### STEP 3 Grill

Secure grill with screws provided.

**Important:** Before turning on power, be sure the control is turned to the lowest setting.



WIRING DIAGRAM

## Operation & Maintenance

### How to operate your heater

1. Once installation is complete and power has been restored, turn the thermostat knob fully clockwise.
2. When the room reaches your comfort level, turn the thermostat knob counterclockwise until the heater turns off. The heater will automatically cycle around this preset temperature.
3. To reduce the room temperature, turn the knob counterclockwise. To increase the room temperature, turn the knob clockwise.

### Maintenance

As needed, or every six months minimum.

1. **⚠️ WARNING! Before removing grill, turn the electrical power off at the electrical panel board (circuit breaker or fuse box). Lock or tag the panel board door to prevent someone from accidentally turning the power on while you are working on the heater. Failure to do so could result in serious electrical shock, burns, or possible death.**
2. Turn the heater thermostat all the way up and wait approximately 30 seconds.
3. If the heater turns on, you have turned off the wrong circuit breaker at the breaker panel or fuse box.
4. If heater does not turn on, proceed with removing grill.

5. Wash grill with hot soapy water and dry immediately.
6. Vacuum out dust and lint on inside of unit without touching elements. For hard to reach areas, you may also blow the debris out of the unit (using the blow cycle setting on your vacuum cleaner), then vacuum accordingly.
7. Replace grill with screws.
8. Turn thermostat to desired setting.
9. Turn power back on at the circuit breaker panel or fuse box.

### About the Heater Temperature-Limiting Controls

The heater is protected by a manual reset temperature limiting control designed to open the heater circuit when excessive operating temperatures are detected. The problem must be assessed and the limit must be reset to resume operation.

### Resetting the Manual-Reset Limit Control

If the manual reset limit control has opened the heater circuit due to excessive operating temperatures, the heater will not work until the limit reset button is pressed. After allowing the unit to cool for at least 10 minutes, turn the electrical power off at the electrical panel board (circuit breaker or fuse box) and remove the grill. Once the problem causing the limit to trip has been resolved, push button located on the left side of the heat box. Press FIRMLY, and be sure to listen and feel for a click, indicating it has been reset.

**⚠️ WARNING**  
Risk of Electrical Shock. Connect grounding lead to grounding wire provided. Keep all foreign objects out of heater.

**⚠️ WARNING**  
Risk of Fire. Heater must be kept clear of all obstructions: a minimum of 3 feet in front; 6 inches on both sides and above. Heaters must be kept clean of lint, dirt and debris.

**⚠️ WARNING**  
Turn the electrical power off at the electrical panel board (circuit breaker or fuse box) and lock or tag the panel board door to prevent someone from turning on power while you are working on the heater. Failure to do so could result in serious electrical shock, burns, or possible death.

## Troubleshooting Chart

CONSULT LOCAL ELECTRICAL CODES TO DETERMINE WHAT WORK MUST BE PERFORMED BY QUALIFIED ELECTRICAL SERVICE PERSONNEL

Symptom	Problem	Solution
Breaker trips immediately upon energizing heater.	<ol style="list-style-type: none"> <li>1. Incorrect supply voltage.</li> <li>2. Overloaded circuit.</li> <li>3. A short circuit exists in the supply or heater wiring.</li> <li>4. Defective circuit breaker.</li> </ol>	<ol style="list-style-type: none"> <li>1. Verify that supply voltage matches the heater rating.</li> <li>2. The total amperage of all heaters on a branch circuit must not be more than 80% of the amperage rating of the circuit breaker and supply wire ratings. Use a lower wattage heater, or reduce the number of heaters on the circuit.</li> <li>3. Shorted supply or heater wires may be accompanied by severe sparking. Inspect all supply and heater wiring insulation for damage. Do not reset the circuit breaker until all electrical shorts have been repaired.</li> <li>4. Replace the circuit breaker.</li> </ol>
Heater fan operates, but does not discharge warm air.	<ol style="list-style-type: none"> <li>1. Insufficient element temperature.</li> <li>2. Incorrect supply voltage.</li> <li>3. Element has failed.</li> </ol>	<ol style="list-style-type: none"> <li>1. Allow a few moments for element to reach operating temperature.</li> <li>2. Verify that supply voltage matches the heater rating.</li> <li>3. Replace element.</li> </ol>
Heater will not shut off.	<ol style="list-style-type: none"> <li>1. Heat loss from room is greater than heater capacity.</li> <li>2. Defective thermostat.</li> <li>3. Thermostat wired incorrectly to heater.</li> </ol>	<ol style="list-style-type: none"> <li>1. Close doors and windows. Provide additional insulation, install a higher-wattage heater or multiple heaters if necessary.</li> <li>2. Adjust thermostat to its lowest setting. If heater continues to run (allow two minutes for the thermostat to respond), replace thermostat.</li> <li>3. Refer to thermostat documentation and correct wiring.</li> </ol>
Heater discharges smoke or emits a burnt odor.	<ol style="list-style-type: none"> <li>1. Dust, lint or other matter has accumulated inside heater.</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean heater (see "Operation &amp; Maintenance" section for instructions).</li> </ol>
Element heats for a moment without the fan turning, then immediately stops heating.	<ol style="list-style-type: none"> <li>1. Defective motor or internal connection.</li> <li>2. Fan or motor jammed.</li> </ol>	<ol style="list-style-type: none"> <li>1. Heater or fan motor requires replacement.</li> <li>2. Remove obstruction and press heater reset button (after allowing the unit to cool). Test heater operation--if reset button has been pressed (be sure to listen and feel for a click indicating it has been reset), but heater does not run, heater requires repair or replacement.</li> </ol>
Heater does not run.	<ol style="list-style-type: none"> <li>1. Thermostat set too low.</li> <li>2. Heater has tripped the high-temperature reset switch.</li> <li>3. Power not on at the circuit breaker.</li> <li>4. Broken or poorly connected wire(s) to heater.</li> <li>5. Defective thermostat.</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust thermostat to a higher temperature until heater operates (see Problem #6 if the problem persists).</li> <li>2. Press the heater reset button (see "Operation &amp; Maintenance" section for instructions).</li> <li>3. Turn on the correct circuit breaker in the main panel.</li> <li>4. Turn off power at circuit breaker. Check supply wire continuity and proper connection to heater wires.</li> <li>5. Turn off power at circuit breaker. Jumper across thermostat terminals. Turn on main circuit breaker. If heater operates, thermostat is defective and should be replaced. Remove jumper before operating heater.</li> </ol>

Contact Cadet for information on Parts or Service.

## Warranty

**LIMITED ONE-YEAR WARRANTY:** Cadet warrants that it will repair or replace any Cadet product found to be defective or malfunctioning during the first year after date of purchase to the original consumer.

**LIMITED TWO-YEAR WARRANTY:** Cadet warrants that it will repair or replace, to the original consumer, any Cadet SL element or motor found to be defective or malfunctioning from first date of purchase through the second year.

**These warranties do not apply:**

1. To conditions resulting from (a) improper installation, or (b) incorrect electric current.
2. To conditions resulting from improper maintenance, misuse, abuse, accident or alteration.
3. To service calls or labor involved in replacing defective part.
4. If the date of manufacture cannot be determined.
5. To freight damaged products.

Cadet shall not be liable for commercial consequential damages such as property damage and incidental expenses resulting from breach of these written warranties or any implied warranty. These warranties give you specific legal rights, and you may also have other rights which vary from state to state. Cadet neither assumes, nor authorizes anyone to assume for it, any other obligation or liability in connection with these electric heaters or any part of such heaters. If the product warranted should become defective during the warranty period, contact Cadet Manufacturing Co. for instructions on how to have the repair or replacement processed. Products returned without authorization will be refused. To prolong the life of your heater, it is necessary to follow the maintenance guidelines included with each heater. Failure to maintain your heater will result in the warranty being voided.