

## OWNER'S GUIDE

# COM-PAK MAX

VERSATILE, MULTI-WATT WARMTH



Thank you for your purchase! Question or problem? Let us solve it with a single phone call, email or online chat! We'll save you a trip back to the store!

### Cadet Customer Service

Phone: **855.223.3887**

email: [customerservice@cadetheat.com](mailto:customerservice@cadetheat.com)

Website and live chat: [cadetheat.com](http://cadetheat.com) (contact us)

For how-to videos or more information, please visit:

<http://cadetheat.com/install/max>



[cadetheat.com](http://cadetheat.com)

855.CADET.US

Vancouver, Washington



# IMPORTANT INSTRUCTIONS

**⚠** When using electrical appliances, basic precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:

1. Read all instructions before installing or using this heater.
2. This heater is hot when in use. To avoid burns, do not let bare skin touch hot surfaces. Keep combustible materials, such as furniture, pillows, bedding, papers, clothes, etc. and curtains at least 3 feet (0.9 meters) from the front of the heater and keep them away from the sides.
3. Extreme caution is necessary when any heater is used by or near children or invalids and whenever the heater is left operating and unattended.
4. Do not operate any heater after it malfunctions. Disconnect power at service panel and have heater inspected by a reputable electrician before reusing.
5. Do not use outdoors.
6. To disconnect heater, turn control(s) to off, and turn off power to heater circuit at main disconnect panel.
7. Do not insert or allow foreign objects to enter any ventilation or exhaust opening as this may cause an electric shock or fire, or damage the heater.
8. To prevent a possible fire, do not block air intakes or exhaust in any manner.
9. A heater has hot and arcing or sparking parts inside. Do not use it in areas where gasoline, paint, or flammable vapors or liquids are used or stored.
10. Use this heater only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock, or injury to persons.
11. The heater must be installed in a fixed, permanent location.

## SAVE THESE INSTRUCTIONS

### **⚠ KNOW YOUR VOLTAGE! ⚠**

If you are uncomfortable working with electricity, running electrical supply wire or installing a circuit breaker, please consult a licensed electrician. Make sure power to the heater is turned off at the main disconnect panel whenever doing any work on a heater. Serious injury or electrocution can result from electric shock.

Com-Pak Max Models With Built-in Thermostat: Use only with Vertical Grill (sold separately) and mount vertically or horizontally.

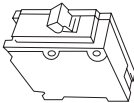
- Wall thermostat not required

Com-Pak Max Models Without Thermostat: Use with Horizontal or Vertical Grill (sold separately) and mount horizontally or vertically.

- Required for use with horizontal grill
- Wall thermostat required
- **CHECK YOUR BREAKER!** If you're replacing an existing heater, check the labels of the old heater and use the same voltage.

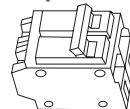
#### single-pole breaker

120 volt



#### double-pole breaker

240 volt



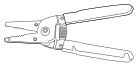
**WARNING:** Connecting a heater to a voltage higher than what's listed on its rating label will destroy the heater and could start a fire. A heater will not heat properly when connected to a voltage lower than what's listed on its rating label.

Unanswered questions? Call our technical support team in Vancouver, Washington toll free at **855.223.3887** or from outside the US **360.693.2505**.

# INSTALLATION INSTRUCTIONS

1. 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.
2. Use copper conductors only.
3. DO NOT install the heater directly above bathtub or sink. DO NOT install in shower stall area. Cadet recommends installing your heater at least 2 feet (61 cm) away to prevent contact with water.
4. Heater must be installed in a wall can:  
Model CM - wall can model CC or CCSM
5. DO NOT install the heater in a floor, in the ceiling, below a towel bar, behind a door, or anywhere the air discharge may be blocked in any manner.
6. To reduce the risk of fire, do not store or use gasoline or other flammable vapors and liquids in the vicinity of the heater.
7. Connect grounding lead to grounding screw provided. Keep all foreign objects out of heater.
8. CAUTION – High temperature, risk of fire, keep electrical cords, drapery, furnishings and other combustibles at least 3 feet (0.9 m) from the front of the heater and away from the side and rear.

## TOOLS REQUIRED



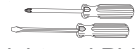
Wire Strippers



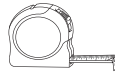
Wire Connectors



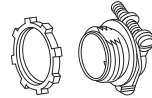
1½" Wood Screws

Straight and Phillips  
Screwdrivers

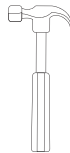
Drill and Drill Bits



Tape Measure

½" Cable Clamp  
Connector

Volt Meter



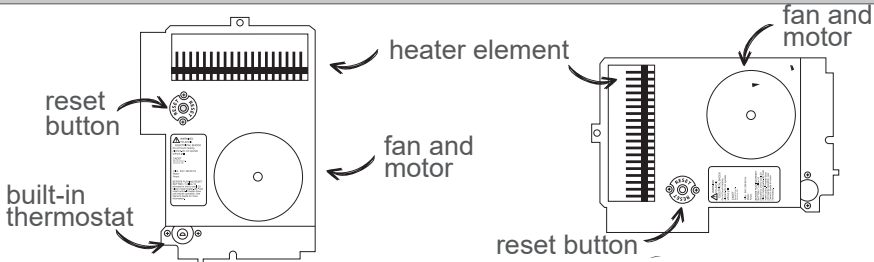
Hammer



Stud Finder

A multi-purpose tool or something to cut your existing drywall or gypsum board.

## PARTS OF YOUR HEATER

Vertical Mount  
With ThermostatHorizontal Mount  
No Thermostat

# INSTALLATION INSTRUCTIONS

## TIPS BEFORE YOU BEGIN

- **Verify power has been turned off before starting any work!**
- The Com-Pak Max can only be mounted with the element up or to the left. It cannot be mounted in the ceiling or in the floor. For multiple heater wiring, see page 6.
- For cleaner performance and longer heater life, install your heater 12 inches (30.5 cm) from the floor.
- All models can be installed to be Americans with Disabilities Act (ADA) compliant. Check your state and local requirements.
- The wall can label arrows show the correct mounting orientation (arrows must point up).
- A wall thermostat is required for ALL models without a built-in thermostat (CM152, CM158, CM192, CM198) and horizontally mounted units must use a wall thermostat. A Cadet electronic thermostat is recommended for ultimate control and comfort.

### STEP 1 Cut a hole in the wall next to a wall stud

If you haven't installed drywall yet, skip this step.

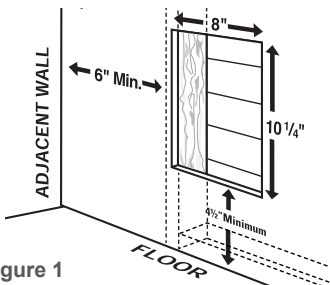


Figure 1  
Vertical - Element at top

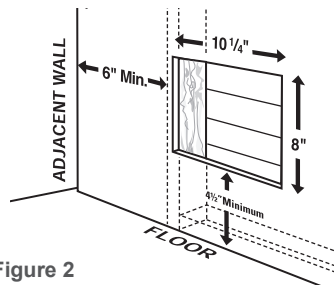


Figure 2  
Horizontal - Element at left

### STEP 2 Locate or route electrical supply wires

Route the electrical supply wire from the circuit breaker to the heater location.

Remove a knockout from the wall can (best location is closest to heater wires) and attach the supply wire with a cable clamp connector (not included) leaving a minimum of 6 inches (15.2 cm) wire lead (See Figure 3).

### STEP 3 Mount the wall can

If you haven't installed drywall yet, make sure the front of the wall can extends beyond the front edge of the wall stud to match the drywall depth (See Figure 3).

If you already have drywall installed, place the can into the cutout so the front is flush with the drywall. Fasten the wall can to the stud with two screws through holes provided in the wall can (See Figure 3). As an option, the foam pad provided may be attached to the side of the wall can to square the wall can to the stud.

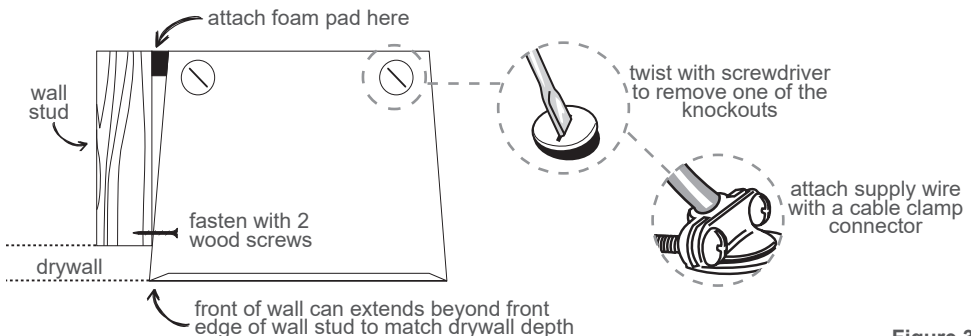


Figure 3  
View from top of wall can

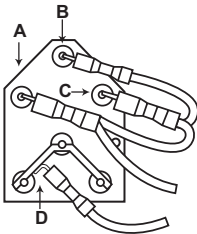
# INSTALLATION INSTRUCTIONS

## HOW TO CHANGE WATTS (WIRE CONFIGURATIONS)

### Multi-watt element wire connections

All models are factory set to maximum wattage (See Figures 4 and 5). If you don't need to lower the wattage, proceed to Step 4. You can lower the wattage by changing the element wire connections on the left side of the heater assembly (See below). When finished, proceed to Step 4.

#### For MODELS CM192 and CM198 1900 Watt Configuration Shown



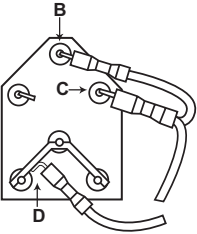
**FACTORY SET  
AT 1900 WATTS**

**NEVER DISCONNECT THE BLUE CONNECTOR FROM TERMINAL "D"**

DESIRED WATTAGE	CM192/CM198	WIRE CONFIGURATION
	1900	
1500		Disconnect and cut wire with Blue Connector at Terminal B. Cap loose end with wire connector or wrap with electrical tape. Move Yellow Connector from Terminal A to Terminal B.
1100		Disconnect and cut wire with Blue Connector at Terminal B. Cap loose end with wire connector or wrap with electrical tape. Move Yellow Connector from Terminal C to Terminal B.
700		Cut jumper wire between terminals A and C. Cap loose ends with wire connector or wrap with electrical tape. Remove connectors at Terminals B and C. Move Yellow Connector from Terminal A to Terminal B.
400		Cut jumper wire between terminals A and C. Remove connectors at Terminals B and C. Cap loose ends with wire connector or wrap with electrical tape.

Figure 4

#### For MODELS CM152 and CM158 1500 Watt Configuration Shown



**FACTORY SET  
AT 1500 WATTS**

**NEVER DISCONNECT THE BLUE CONNECTOR FROM TERMINAL "D"**

DESIRED WATTAGE	CM152/CM158	WIRE CONFIGURATION
	1500	
800		Disconnect and cut wire with Blue Connector at Terminal B. Cap loose end with wire connector or wrap with electrical tape.
700		Disconnect and cut wire with Blue Connector at Terminal B. Cap loose end with wire connector or wrap with electrical tape. Move yellow connector from Terminal C to Terminal B.

Figure 5

## INSERT THE HEATER ASSEMBLY IN THE WALL CAN

### STEP 4 Wire connections

1. Your heater has two connection wires on the bottom. Your supply wire has two connection wires and a supply ground wire.

**A.** Connect supply ground wire to grounding screw in wall can (See Figure 6).

**B.** Connect one supply wire to one heater wire with a wire connector (not included).

For 240 or 208 volts, it doesn't matter which heater wire. Both supply wires (black and white) are hot. Wrap supply (white) wire with black tape to identify it as hot (Figure 6).

**C.** Connect the remaining supply wire to the remaining heater wire with a wire connector (not included) (See Figure 6).

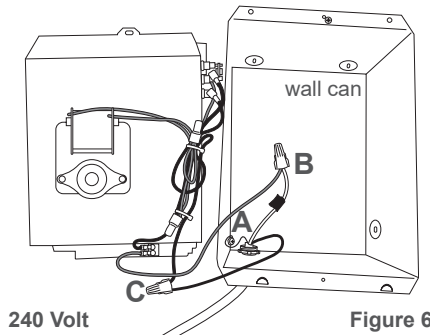


Figure 6

# INSTALLATION INSTRUCTIONS

## STEP 4 Wire connections

2. Insert the bottom edge of the heater assembly into the D-shaped tabs at the bottom of the wall can. For heaters mounted with the element at left, insert the right edge of the heater assembly into the half round slots (D-shaped tabs) on the right side of the wall can.
3. Push all wires back into the bottom (or right side) of the wall can. Make sure connections are tight and none of the wires are caught between the motor and the wall can, or pinched between the side of the heater and the wall can.
4. Attach the heater assembly at top (or left side) of the wall can with screw provided.

## STEP 5 Install grill

Attach grill with screws provided. Slide thermostat knob onto shaft if you have a model with a built-in thermostat. Turn electrical power back on at the main disconnect panel.

Proceed to OPERATING INSTRUCTIONS.

More frequently asked questions on our website here: [cadetheat.com/support/FAQ](http://cadetheat.com/support/FAQ)

## MULTIPLE HEATERS ON ONE CIRCUIT BREAKER (240 OR 208 VOLTS ONLY)

More than one heater can be wired in parallel on the same circuit breaker (be sure to check national and local codes for safety requirements). Additional electrical supply wire and cable clamp connectors are required. The heaters must be in the same room.

Maximum amperage you can put on one circuit breaker is limited to 80% of the circuit breaker capacity.

1. Route the electrical supply wire from the circuit breaker to heater #1. Remove two knockouts and attach two sets of electrical supply wire with two cable clamp connectors (not included) leaving a minimum of 6 inches wire lead—one set from the circuit breaker, the other set to heater #2 (See Figure 7).
2. The two supply ground wires in the wall can of heater #1 need to make a 3-wire connection with the grounding screw. Attach a short copper ground wire to the grounding screw in the wall can. Connect this wire and the two supply ground wires with a wire connector (not included) (See Figure 7).
3. For heater #1, connect each heater wire with one of the supply wires going to the circuit breaker, and one of the supply wires going to heater #2. Each of the wires from heater #1 must have a 3-wire connection. For heater #2, make the connections in the wall can as shown below.

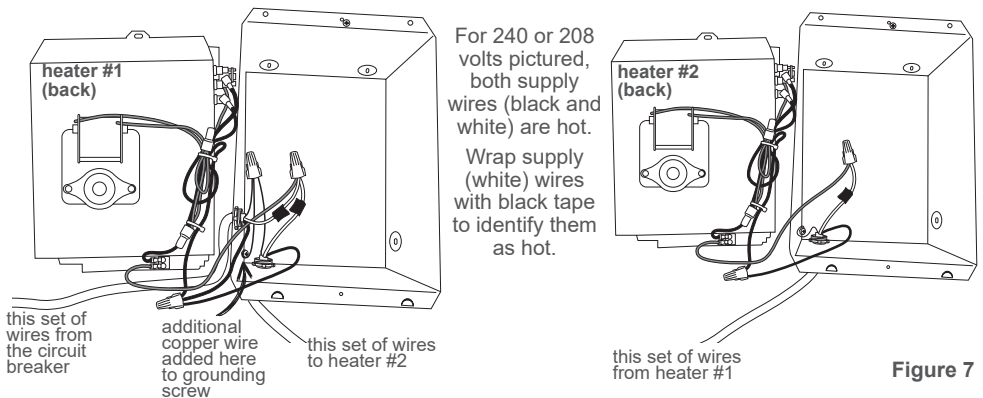


Figure 7

After making all connections, go to **STEP 4 Wire connections**, number 2 above.

# OPERATING INSTRUCTIONS

1. Make sure all wires are properly connected and installation is complete before you turn on the heater.
2. Do not operate without grill.
3. Do not tamper with the high-temperature safety shutoff.

## Complete installation

After installation, turn your thermostat to the highest setting and let the heater run for 30 minutes. Some smoking may occur as the element initially burns off residue from manufacturing.

If your heater shows signs of overheating, such as glowing red or repeatedly getting unusually hot and shutting off, immediately turn off the circuit breaker and review the "KNOW YOUR VOLTAGE" section or call us.

If the high-temperature safety shutoff trips more than once a day, replace the heater.

## How to operate your heater

The room temperature is controlled by a thermostat located either on the wall, or on the heater. Once installation is complete and power is on, follow the steps below for your thermostat.

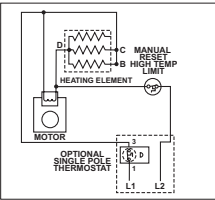
If you have a wall or built-in thermostat with a knob:

1. Turn the thermostat knob all the way to the right.
2. When the room reaches your comfort level, turn the knob to the left, just until it clicks and the heater turns off. The heater will automatically keep the room temperature around this setting.
3. To reduce the room temperature, turn the knob to the left. To increase the room temperature, turn the knob to the right.

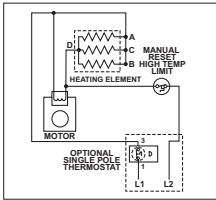
If you have an electronic wall thermostat, follow the instructions in the programming and operating guide included with your thermostat.

## INTERNAL HEATER WIRING DIAGRAMS

### WITH BUILT-IN THERMOSTAT

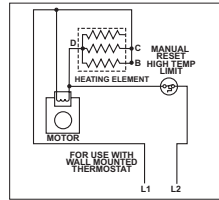


Com-Pak Max Models  
CM152T and CM158T

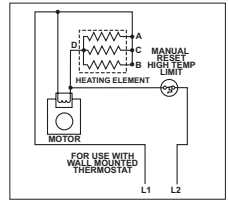


Com-Pak Max Models  
CM192T and CM198T

### WITHOUT THERMOSTAT



Com-Pak Max Models  
CM152 and CM158



Com-Pak Max Models  
CM192 and CM198

## WARRANTY

For more effective and safer operation and to prolong the life of the heater, read the Owner's Guide and follow the instructions. Failure to properly maintain the heater will void any warranty and may cause the heater to function improperly.

**LIMITED THREE YEAR WARRANTY:** Cadet will repair or replace any Com-Pak Max (CM) heater found to be defective within three years after the date of purchase.

**These warranties do not apply:**

1. Damage occurs to the product through improper installation or incorrect supply voltage;
2. Damage occurs to the product through improper maintenance, misuse, abuse, accident, or alteration;
3. The use of unauthorized accessories or unauthorized components constitutes an alteration and voids all warranties. Refer to Cadet website or call customer service at 855.223.3887 or 360.693.2505 for list of authorized accessories and components.

4. Cadet's warranty is limited to repair or replacement.
5. In the event Cadet elects to replace any part of your Cadet product, the replacement parts are subject to the same warranties as the product. The installation of replacement parts does not modify or extend the underlying warranties. Replacement or repair of any Cadet product or part does not create any new warranties.

If you believe your Cadet product is defective, please contact Cadet during the warranty period, for instructions on how to have the repair or replacement processed.

### Parts and Service

Visit [cadetheat.com/parts-service](http://cadetheat.com/parts-service) for information on where to obtain parts and service.

To register your product, visit [cadetheat.com/product-registration](http://cadetheat.com/product-registration)

# MAINTAINING YOUR HEATER

Clean heater at least every 6 months or as required. Do not lubricate motor.  
**WARNING – Risk of electrical shock, turn off power before removing grill.**

1. Turn off power at the main disconnect panel.
2. Wait for the heater to cool.
3. Remove knobs and grill.
4. Wash grill with hot soapy water and dry.
5. Blow air through the heating element with a hair dryer or shop vacuum on blow cycle.
6. Clean the fan with a vacuum cleaner.
7. Replace grill and knobs.
8. Turn power back on at the main disconnect panel.

Any service other than cleaning should be performed by an authorized service representative.

## High-temperature safety shutoff

All Com-Pak Max heaters come with a built-in high-temperature safety shutoff that stops electricity flowing to the heater if it gets too hot inside. See TROUBLESHOOTING below if you're experiencing problems with your heater.

## TROUBLESHOOTING

Symptom	Problem	Solution
Heater smells after installation or not being used.	<ol style="list-style-type: none"> <li>1. Odor from element manufacturing process.</li> <li>2. Dust or lint inside the heater.</li> <li>3. Supply connections are loose.</li> </ol>	<ol style="list-style-type: none"> <li>1. In a new installation, some smoking may occur as the element initially burns off residue from manufacturing. It typically goes away within several hours.</li> <li>2. Clean heater (see "MAINTAINING YOUR HEATER" above for instructions).</li> <li>3. Turn off power at main disconnect panel. Inspect and/or tighten all the wire connectors inside the heater and at any connection points.</li> </ol>
Heater doesn't work at all.	<ol style="list-style-type: none"> <li>1. Thermostat is set too low.</li> <li>2. Heater has tripped its built-in high-temperature safety shutoff and electricity has stopped flowing to the heater.</li> <li>3. Grill pressed against reset button, tripping high temperature safety shutoff.</li> <li>4. Circuit breaker is faulty.</li> <li>5. Supply connections are loose.</li> <li>6. Defective thermostat.</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust thermostat to a higher temperature until heater operates.</li> <li>2. TO RESET: Turn power off at main disconnect panel. Allow 10 minutes to cool. Make sure heater is not blocked and is clean. Push reset button. Restore power. If the high-temperature safety shutoff trips more than once a day, replace the heater.</li> <li>3. Adjust grill so louvers do not press against reset button.</li> <li>4. Call a licensed electrician.</li> <li>5. Turn off power at main disconnect panel. Inspect and/or tighten all the wire connectors inside the heater and at any connection points.</li> <li>6. Replace the heater.</li> </ol>
Breaker trips immediately after installing heater.	<ol style="list-style-type: none"> <li>1. A short circuit exists in the electrical supply wires or heater wiring.</li> <li>2. Circuit is overloaded.</li> <li>3. Circuit breaker is faulty.</li> </ol>	<ol style="list-style-type: none"> <li>1. An incorrect connection in the heater or electrical supply wires may cause sparking or arcing. Inspect all heater and electrical supply wiring insulation for damage or call an electrician.</li> <li>2. Use a lower wattage heater, or reduce the number of heaters on the circuit.</li> <li>3. Call a licensed electrician.</li> </ol>
Heater blows cold air or doesn't get hot.	<ol style="list-style-type: none"> <li>1. Element has failed.</li> <li>2. Incorrect supply voltage.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace heater.</li> <li>2. Double check the voltage of the heater to make sure it matches the voltage of the circuit.</li> </ol>
Heater doesn't turn off.	<ol style="list-style-type: none"> <li>1. Incorrect heater wattage for room size.</li> <li>2. Defective thermostat.</li> <li>3. Thermostat wired incorrectly to heater.</li> </ol>	<ol style="list-style-type: none"> <li>1. Install additional heaters if circuit allows.</li> <li>2. Adjust thermostat to its lowest setting. If heater continues to run (allow two minutes for the thermostat to respond), and room temperature is greater than 50° F; replace the thermostat.</li> <li>3. Refer to thermostat installation guide and correct wiring.</li> </ol>
Built-in high-temperature safety shutoff keeps tripping.	<ol style="list-style-type: none"> <li>1. Airflow is blocked.</li> <li>2. Dust, lint or other matter has accumulated inside heater.</li> <li>3. Fan or motor is jammed.</li> </ol>	<ol style="list-style-type: none"> <li>1. Remove obstruction(s). Maintain minimum distances (See Page 2).</li> <li>2. Clean heater (see "Maintenance" section for instructions).</li> <li>3. Remove obstruction, and press heater manual reset button (see "Operating" section for instructions).</li> </ol>

**If you are uncomfortable working with electricity, running electrical supply wire or installing a circuit breaker, please consult a licensed electrician.**



### Reduce-Reuse-Recycle

This product is made primarily of recyclable materials. You can reduce your carbon footprint by recycling this product at the end of its useful life. Contact your local recycling support center for further recycling instructions.