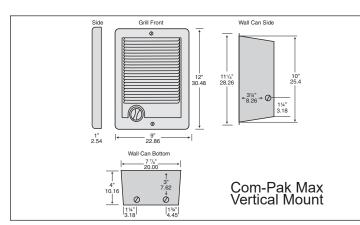
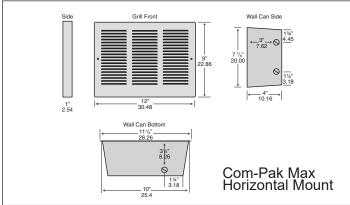


Benefits You Can Depend On

- · Safe for you and your family Peace of mind with automatic high temperature shutoff feature
- · Our sturdiest element provides cozy warmth for years of reliable use
- · Common sense components designed with you in mind
 - 1. NO sharp edges
 - 2. Corrosion resistant
 - 3. Easy to install heater, one screw
 - 4. Easy to install wall can
- · Your Cadet heater has been thoroughly tested and is guaranteed with a 3 year extended warranty





- TOOLS REQUIRED:
- Phillips Screwdriver
- Straight Screwdriver
- Wire Strippers
- Utility Knife (4) 1 1/2" Wood Screws
- Insulated Wire Connectors
- (1) 1/2" Cable Clamp Connector

Com-Pak Max Heater

Owner's Guide

http://www.cadetheat.com/products/wall-heaters/com-pak-max

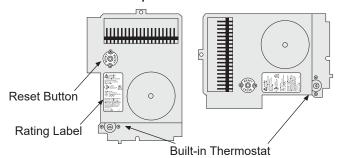
Com-Pak Max Models				
Line Voltage	Model w/o Thermostat	Model w/ Thermostat (1)	Watts	Amps
	CM152	CM152T	1500	6.3
			800	3.3
			700	2.9
240 (2)	CM192	СМ192Т	1900	7.9
240 (2)			1500	6.3
			1100	4.6
			700	2.9
			400	1.7
208	CM158		1500	7.2
			800	3.8
			700	3.4
	CM198	CM198T	1900	9.1
			1500	7.2
			1100	5.3
			700	3.4
			400	1.9

- (1) Standard built-in thermostat is single pole and has no "OFF" position.
- (2) 240 volt models can be used at 208 volts. Wattage equals 75% of 240v rated

Note: Optional grill kits and wall can sold separately

Com-Pak Max Models With Thermostat Use only with Vertical Grill and Mount Vertically or Horizontally

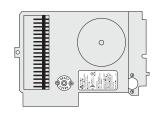
Wall Thermostat Not Required



Com-Pak Max Models Without Thermostat Use with Horizontal Grill or Vertical Grill

- · Required for Use with Horizontal Grill
- Wall Thermostat Required







IMPORTANT INSTRUCTIONS

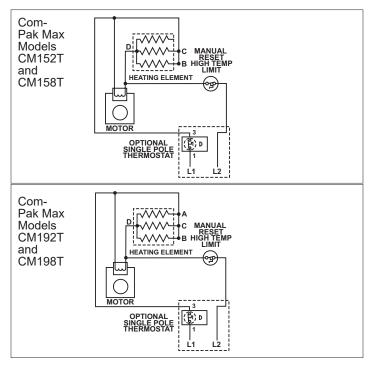
WARNING

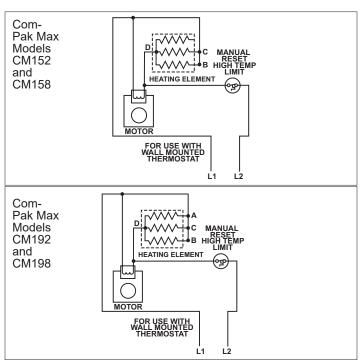
When using electrical appliances, basic precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:

- 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 properly installed before it is used.
- 12. Save these instructions.

Wiring Diagrams





SAVE THESE INSTRUCTIONS

<u>INSTALLATION INSTRUCTIONS</u>

- 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. Canadian installations must comply with Codes Canada and provincial 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 connected to a GFCI protected branch circuit when installed in a bathroom.

- Heater must be installed in a wall can:Model CM wall can model CC or CCSM
- 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.
- 7. To reduce the risk of fire, do not store or use gasoline or other flammable vapors and liquids in the vicinity of the heater.
- 8. Connect grounding lead to grounding screw provided. Keep all foreign objects out of heater.
- 9. Electric heaters must be installed on a circuit dedicated to electric heaters, they cannot share a circuit with outlets, lights, or other appliances.

Part One

PLACEMENT: Install the Com-Pak Max (Model CM) vertically (recommended), or horizontally with optional grill kit. Note wall can position for correct horizontal mounting. NOT APPROVED FOR CEILING MOUNT.

THERMOSTAT: A wall thermostat is required for models without a built-in thermostat. Vertically mounted units can use built-in thermostat. Horizontally mounted units must use a wall thermostat. A Cadet Electronic thermostat is recommended for ultimate control and comfort.

How do I install for new construction?

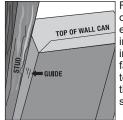
STEP 1 Mount The Wall Can

REQUIRED MINIMUM distance of 6 inches from adjacent surfaces and 4-1/2 inches from the floor (See Figures 4a and 4b). However, Cadet RECOMMENDS 12 inches from adjacent surfaces and floor for longer and cleaner performance. Heaters must be spaced at least 3 feet apart.

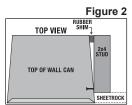
Review the wall can label for correct direction (as noted by the UP arrows) before mounting the wall can to the stud. In the VERTICAL mounting position the element of the heater assembly will be at the TOP. In the HORIZONTAL mounting position the element of the heater assembly will be to the LEFT.

Keeping front of the wall can flush with the finished wall surface (See Figure 1), secure the wall can to the stud with 2 screws (not included) through holes provided in the wall can. The rubber shim provided may be attached to the side of the wall can to square the wall can to the stud (See Figure 2).

Figure 1



Face of wall can must extend 1/2 inch or 5/8 inch from face of stud to allow for thickness of sheetrock.



Attach wall can to stud with screws.

STEP 2 Route Supply Wires

Route supply wire from the circuit breaker, to the thermostat, to the wall can. For models with a built-in thermostat, route supply wire from the circuit breaker to the wall can. Remove a knockout from the wall can and attach the supply wire with a strain relief connector (not included) leaving a minimum of 6 inches wire lead for later use. Connect supply ground wire to grounding screw in wall can (See Figure 3).

Proceed to PART TWO.

How do I install in an existing wall?

STEP 1 Cut A Hole In The Wall

REQUIRED MINIMUM distance of 6 inches from adjacent surfaces and 4-1/2 inches from the floor (See Figures 4a & 4b). However, Cadet RECOMMENDS 12 inches from adjacent surfaces and floor for longer and cleaner performance. Heaters must be spaced at least 3 feet apart.

Vertical Mount: Cut a hole 8 inches wide by 10¼ inches high next to a wall stud.

Horizontal Mount: Cut a hole 101/4 inches wide by 8 inches high next to a wall stud.

STEP 2 Route Supply Wires

Route supply wire from the circuit breaker, to the thermostat, to the wall can. For models with a built-in thermostat, route supply wire from the circuit breaker to the wall can. Remove a knockout from the wall can and attach the supply wire with a strain relief connector (not included) leaving a minimum of 6 inches wire lead for later use. Connect supply ground wire to grounding screw in wall can (See Figure 3).

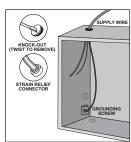


Figure 3

STEP 3 Mount The Wall Can

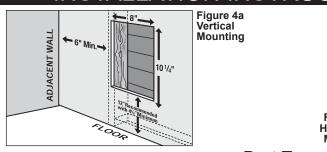
Review the wall can label for correct direction (as noted by the UP arrows) before mounting the wall can to the stud. In the VERTI-CAL mounting position the element of the heater assembly will be at the TOP. In the HORIZONTAL mounting position the element of the heater assembly will be to the LEFT. Insert wall can into wall opening

Keeping front of the wall can flush with the finished wall surface, secure the wall can to the stud with 2 screws (not included) through holes provided in the wall can. The rubber shim provided may be attached to the side of the wall can to square the wall can to the stud (See Figure 2).

(Note: Vertical installation places half round slots on the bottom, horizontal installation places half round slots to the right).

Proceed to PART TWO.

INSTRUCTIONS (continued)



101/4" ADJACENT WAL Figure 4b Horizontal Mounting

Part Two

After you have followed all instructions in PART ONE you are ready to install the heater assembly.

How do I configure my wattage?

STEP 1 Multi-Watt Element Wiring Configuration:

The multi-watt heaters listed below are factory set for the highest possible wattage. If you would like to keep the wattage at the highest setting, proceed to Step 2. If you would like to reduce your heater's wattage from the factory setting, refer to the table below that corresponds to your heater model. Once you are finished, proceed to Step 2.

NEVER DISCONNECT THE BLUE CONNECTOR FROM TERMINAL "D"

	CM192/CM198	WIRE CONFIGURATION
1	1900	No change
TAGE	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.
SIRED WATTAGE	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.
ESIRE	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 5a

How do I insert the heater assembly into the wall can? **STEP 2** Install Heater Assembly

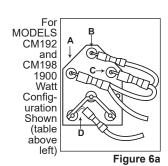
Turn heater assembly upside down (Element down with motor facing you). Connect the supply wires to the heater wires with connectors (See Figure 7). Now rotate the heater so the element and the fan are facing you.

For VERTICALLY MOUNTED units the element should be at the top. Insert the bottom edge of the heater assembly into the half round slots (tabs) in the bottom lip of the wall can (See Figure 8a).

NEVER DISCONNECT THE BLUE CONNECTOR FROM TERMINAL "D"

DESIRED WATTAGE	CM152/CM158	WIRE CONFIGURATION
	1500	No change
	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 5b



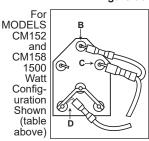


Figure 6b

[IMPORTANT: Push wires into bottom of wall can during insertion. Be sure that supply wires are not caught between motor and wall can.] Attach assembly at top with screw provided.

For HORIZONTALLY MOUNTED units the element should be to the left. Insert the right edge of the heater assembly into the half round slots (tabs) on the right side of the wall can (See Figure 8b). [IMPORTANT: Push wires into right side of wall can during insertion. Be sure that supply wires are not caught between motor and wall can.] Attach assembly at left with screw provided.

STEP 3 Install Grill

Secure grill with the screws provided. If you have a built-in thermostat model, slide thermostat knob onto shaft. Turn power on at the electrical panel board.

Warranty is void if any material is sprayed on the element or blower. Use a paint mask to cover any exposed areas of the heater if walls are to be textured or painted.

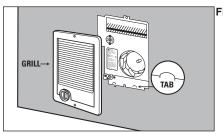
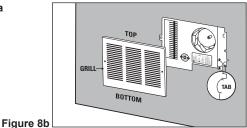


Figure 8a



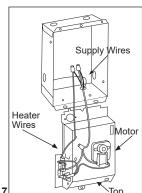


Figure 7

OPERATING INSTRUCTIONS

- 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 heater to the highest setting and let it 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 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 line voltage thermostat located either on the wall or built-in to the 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

About the Manual Reset Temperature Limit Control

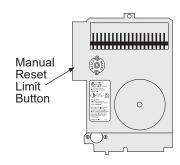
The heater is protected by a temperature-limiting control. The manual reset temperature limit control is designed to open the heater circuit when excessive operating temperatures are detected. The problem must be assessed and the limit must be reset to resume operation.

Resetting the Manual Reset Limit Control

Resetting the Manual Reset Temperature 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 manual reset limit button is pressed.

After allowing the unit to cool for at least 10 minutes and resolving the problem causing the limit to trip (typically the heater is blocked or needs cleaning-see Maintenance Instructions); use a narrow object such as a ball-point pen to access the manual reset button through the upper-left center section of the heater grill. Press FIRMLY and be sure to listen and feel for a click, indicating it has been reset.



<u>Warranty</u>

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 <u>cadetheat.com/parts-service</u> for information on where to obtain parts and service.

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.

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 knob (if any) 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 knob (if any).
- 8. Turn power back on at the main disconnect panel.

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

Troubleshooting Chart *CONSULT LOCAL ELECTRICAL CODES TO DETERMINE WHAT WORK MUST BE PERFORMED BY QUALIFIED ELECTRICAL SERVICE PERSONNEL.

	ELECTRICAL SERVICE PERSONNEL.					
Symptom	Problem	Solution				
Breaker trips immediately upon energizing heater.	Incorrect supply voltage.* Overloaded circuit.* A short circuit exists in the supply or heater wiring.* Defective circuit breaker.*	Verify that supply voltage matches the heater rating. 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. 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. Replace the circuit breaker.				
Heater fan op- erates, but does not discharge warm air.	Insufficient element temperature. Incorrect supply voltage.* Element has failed.*	Allow a few moments for element to reach operating temperature. Verify that supply voltage matches the heater rating. Replace element.				
Heater will not shut off.	Heat loss from room is greater than heater capacity.* Defective thermostat. Thermostat wired incorrectly to heater.*	1. Close doors and windows. Provide additional insulation, or install a higher wattage heater or multiple heaters if necessary. (If your circuit is rated for more capacity.) 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°; replace the thermostat. 3. Refer to thermostat documentation and correct wiring.				
Heater dis- charges smoke or emits a burnt odor.	Dust, lint or other matter has accumulated inside heater. Poor or loose electrical connections.	Clean heater (see "Maintenance" section above for instructions). Turn off power at circuit breaker. Inspect all supply and heater wire connections to make sure nothing is loose or poorly connected. Secure or reconnect all loose connections. Do not reset circuit breaker until all connections have been checked and repaired.				
Element heats for a moment without the fan turning, then im- mediately stops heating.	Defective motor or internal connection.* Fan or motor jammed.	Heater or fan motor requires replacement. Remove obstruction and press heater manual reset button (see "Operating" section for instructions).				
Heater does not run.	1. Thermostat set too low. 2. Heater has tripped the manual reset temperature limit control. 3. Grill pressed against manual reset button, tripping the manual reset temperature limit control. 4. Power not on at the circuit breaker. 5. Broken or poorly connected wire(s) to heater. 6. Defective thermostat.	1. Adjust thermostat to a higher temperature until heater operates (see Problem #6 if the problem persists). 2. Press the manual reset button (see "Operating" section for instructions). 3. Position grill so louvers do not press against manual reset button. 4. Turn on the correct circuit breaker in the main panel. 5. Turn off power at circuit breaker. Check supply wire continuity and proper connection to heater wires. 6. The entire heater, or any of its components may be checked for continuity to determine the cause of any problems. Repair or replace the heater or thermostat.				
Heater continually trips the manual reset temperature limit control.	Dust, lint or other matter has accumulated inside heater. Airflow is blocked. Fan or motor is jammed. None of the above.	1. Clean heater (see "Maintenance" section for instructions). 2. Remove obstruction. Maintain a minimum distance of 6 inches from adjacent surfaces, 4.5 inches from the floor, and 3 feet from furniture or other objects placed directly in front of the heater. 3. Remove obstruction, and press heater manual reset button (see "Operating" section for instructions). 4. Replace heater assembly.				