

# *RedCore*<sup>™</sup>

## OWNER'S MANUAL



**RedCore 1500**  
**Infrared PTC Heater**

# IMPORTANT INSTRUCTIONS



WARNING! - WHEN USING ELECTRICAL APPLIANCES, BASIC PRECAUTIONS SHOULD ALWAYS BE FOLLOWED TO REDUCE RISK OF FIRE, ELECTRIC SHOCK, AND INJURY TO PERSONS, INCLUDING THE FOLLOWING

1. Read all instructions before using this appliance.
2. The heater is hot when in use, to avoid burns, do not place any objects such as furniture, papers, clothes, and curtains closer than 3 feet (0.9 m) to the front of the heater and keep them away from the sides and rear when the heater is plugged in.
3. Extreme caution should be taken when using any appliance around children, elderly, or disabled persons, or whenever the heater is operating unattended.
4. Always unplug heater when not in use.
5. Do not operate heater with a damaged cord or plug, after the heater malfunctions or if the heater has been dropped or damaged in any manner. Discard heater or return to an authorized service facility for examination and/or repair.
6. Do not use outdoors.
7. This heater is not intended for use in bathrooms, laundry areas, and similar indoor locations. Never locate appliance where it may fall into a bathtub or other water container.
8. Do not run cord under carpeting. Do not cover cord with throw rugs, runners, or similar coverings. Do not route cord under furniture or appliances. Arrange cord away from traffic areas and where it will not be tripped over.
9. To disconnect the appliance, turn controls to off, then remove plug from outlet.
10. Connect to properly polarized outlets only.
11. Do not insert or allow foreign objects to enter any ventilation opening as this may cause an electric shock, fire or damage the appliance.
12. To prevent a possible fire, do not block air intakes or exhaust in any manner. Do not use on soft surfaces, like a bed, where openings may become blocked.
13. The heater has hot parts and sparking parts inside. Do not use in areas where gasoline, paint, or flammable liquids are used or stored.
14. Use this appliance only as described in this manual. Any use not recommended by the manufacturer may cause fire, electric shock, or injury to persons.
15. Always plug heaters directly into a wall outlet/receptacle. Do not use an extension cord.
16. To prevent overload and blown fuses, be sure that no other appliance is plugged into the same outlet (receptacle) or into another outlet (receptacle) wired into the same circuit.
17. It is normal for the heater's plug and cord to feel warm to the touch. A plug or cord which becomes hot to the touch or becomes distorted in shape may be a result of a worn electrical outlet (receptacle). Worn outlets or receptacles should be replaced prior to further use of the heater. Plugging this heater into a worn outlet (receptacle) may result in overheating of the power cord or fire.
18. Be sure that the plug is fully inserted into an appropriate receptacle. Please remember that receptacles also deteriorate due to aging and continuous use: check periodically for signs of overheating or deformations of the plug. If any overheating or deformation is present, immediately discontinue using the receptacle and contact a qualified electrician.
19. CAUTION: To prevent electric shock, match wide blade of plug to wide slot of receptacle and insert completely.
20. Do not cover the appliance while it is functioning in order to avoid overheating and/or risk of fire.
21. Do not place the heater near a bed because objects such as pillows or blankets can fall off the bed and be ignited by the heater.
22. Check your heater cord and plug connections.
  - a) Faulty wall outlet connections or loose plugs can cause the outlet or plug to overheat. Be sure the plug fits tight in outlet.
  - b) Heaters draw more current than small appliances. Overheating of the outlet may occur even if it has not occurred with the use of other appliances.
  - c) During use, check frequently to determine if your plug outlet or faceplate is HOT!
  - d) If so, discontinue use of the heater and have a qualified electrician check and/or replace faulty outlet(s).
23. Do not locate against walls or behind drapes or furniture.

**SAVE THESE INSTRUCTIONS**



**CAUTION  
RISK OF ELECTRIC SHOCK  
NO USER-SERVICABLE PARTS INSIDE  
EXCEPT TO CLEAN FILTER  
AND TO ADD WATER TO THE HUMIDIFIER**



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**SPECIFICATIONS**

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Electrical:

- Voltage: 120V~60Hz
- Power: up to 1500Watts
- Heat output: rated at 3500, 4800 and 6000BTU
- Temperature control Range: 60-90 Fahrenheit
- Heating Element: infrared PTC heater
- Expected life cycle: 80,000 hours
- Air purification: lifetime washable pre filter and PCO cell
- Humidifier included with separate control
- LCD display and remote control 2 in 1 design
- 12-hour timer setting for heater and purifier separately.

Coverage:

- Coverage: Up to 1500 Ft<sup>2</sup>

Size:

- Dimensions: 16" high X 13" wide X 15" deep
- Weight: 28 pounds

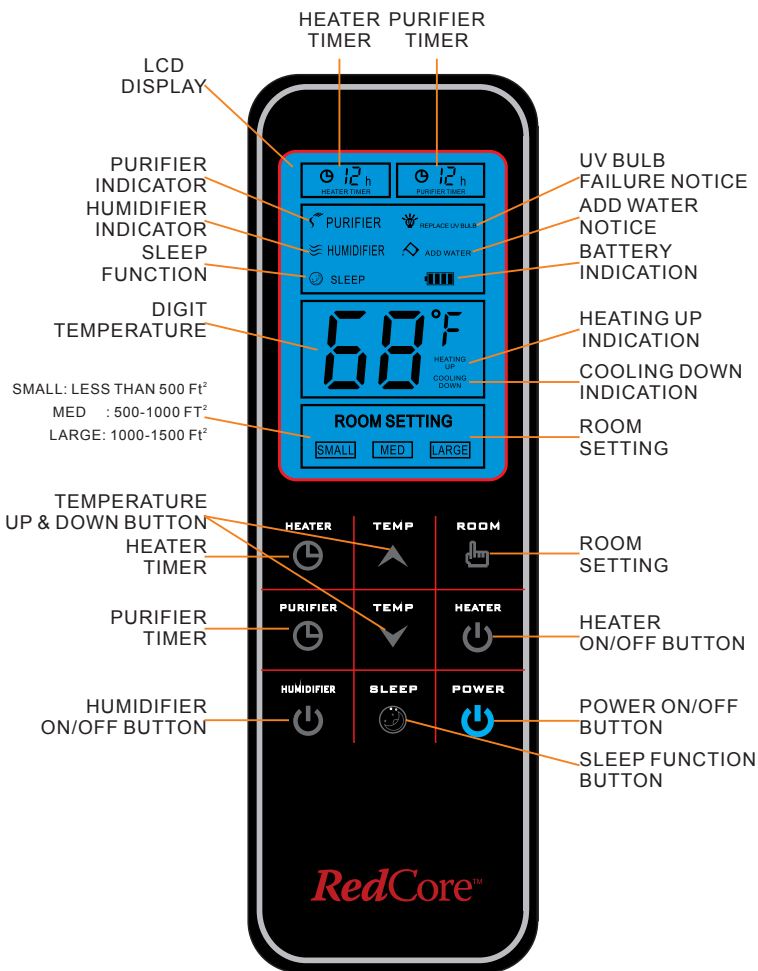
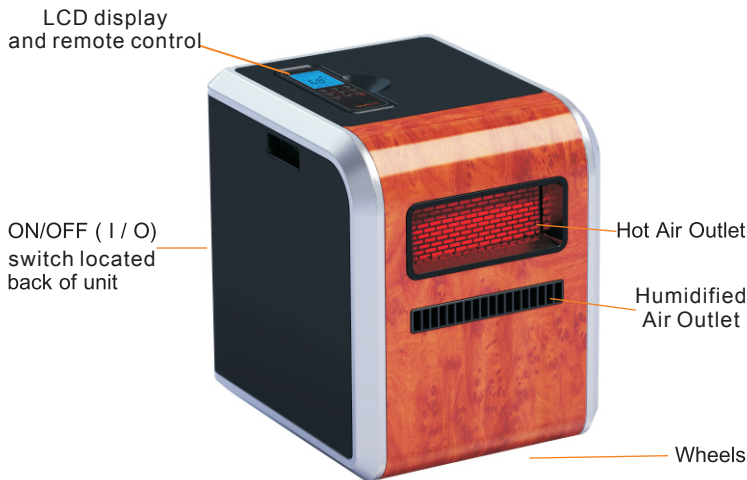
Warranty

- 1 year factory limited warranty

Safety protection:

- Overheat safety shut-down
- Tip-over safety switch
- The unique PTC heater will make sure the heater will never overheat.

## MAIN FEATURES AND CONTROL PANEL



## BUTTONS INTRODUCTION

- **POWER SWITCH** - Turns the power to on (I) or off (O) (Switch located on the back of the unit).
- **LCD DISPLAY AND REMOTE CONTROL** - To show the condition of the heater and to set the heater to desired condition.
- **HEATER TIMER BUTTON** - To set the duration that the heating function will run for from 1h to 12 h.
- **PURIFIER TIMER BUTTON** - To set the duration that the purifier function will run for from 1h to 12 h.
- **TEMPERATURE UP & DOWN** - The buttons are used to adjust target temperature from 60-90 F
- **HEATER ON/OFF** - To turn on or turn off the heating function of the heater.
- **ROOM SETTING** - To select the room size according to the actual size of the room.
- **HUMIDIFIER ON/OFF** - To turn on or turn off the humidifier function of the heater.
- **POWER ON/OFF** - To turn on or turn off the heater.
- **SLEEP BUTTON** - To active the sleep mode that the unit will turn off all the light that the heater will generate.

## LCD DISPLAY INTRODUCTION

- **PURIFIER INDICATOR** - Indicates that the purifier of the heater is working.
- **HUMIDIFIER INDICATOR** - Indicates that the humidifier of the heater is working.
- **SLEEP FUNCTION** - Indicates that the unit is on the sleep mode.
- **DIGIT TEMPERATURE** - To show the room temperature or the desired temperature while adjusting.
- **ROOM SETTING** - To show current room size setting. The heater will work at different power level base on the different room size setting.
- **UV BULB FAILURE NOTICE** - The message will show when the UV bulb has failed in some manner.
- **ADD WATER NOTICE** - The message will show when the humidifier is low on water to humidify the room.
- **BATTERY INDICATION** - To show when the battery that runs the remote is too low.
- **HEATING UP INDICATION** - To indicate that heater is heating up. The fan will not operate while the unit is heating up.
- **COOLING DOWN INDICATION** - To indicate that heater is cooling down. The fan will automatically turn off when the heaters has cooled down to the factory set temperature.

## USING THE REMOTE CONTROL

- The remote control of the heater is combined with LCD display together. The remote control can be used remotely away from the heater to control the functions, or can be used when placed in its location on the heater console.
- The remote control is power by rechargeable battery which can be recharged by placing the remote control into its position on the heater console. Be certain to place it in a manner to allow all contacts to be made.

## OPERATION

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- **Unpackage heater:** cut open tape area, fold back flaps and gently turn entire box upside down. Lift box from styrofoam packing. Remove styrofoam, turn upright. We recommend keeping the package for off-season storage and any transporting needs.
- **Position:** Find a level and unobstructed location to place the unpackaged heater.
- **Plugin:** Plug the power cord directly into an unused grounded 120 volt 15 amp or higher circuit receptacle.
- **remote control:** Remove the film that prevented the battery from touching the contacts during shipment.
- **Power setting:** The heater has 3 power settings and can be used for Small, Medium and Large sized rooms as follows: Small 900 Watts; Medium 1200 Watts; Large 1500 Watts.
- **Power switch:** Press down the power switch located on the rear of the heater to the ON position (I).
- **Power on remote:** Press the power button to turn on the heater. The default setting of the heater will be the air purifier is on. The UV lamp will work to purify the living room for the owner of the heater.
- **Purifier timer:** Press the purifier timer button to set the time that the purifier will run for. The purifier function will work continuously without the timer setting.
- **Heater ON/OFF:** Press the HEATER power button to turn on or off the heating function of the heater. The fan will not work until the heating element has reached a temperature high enough to begin the warming process. During the period that the fan will not work, the message "heating up" will show on the LCD display to indicate that the heater is warming up.
- **Heater timer:** Press the heater timer button to set the timer for the heating function. The heating function will work continuously without the timer setting only if the heater function is on.
- **Room setting:** Press the room selection button to set the room size that the heater will be used in. The small room for less than 500 ft<sup>2</sup>, med room for 500-1000 ft<sup>2</sup> and large room for 1000-1500 ft<sup>2</sup>.
- **Temperature setting:** Press the Temp up and down button to set the desired temperature. The temperature range will be 60-90 degrees Fahrenheit.
- **Humidifier setting:** Press the HUMIDIFIER button to turn on/off the humidifier. Use caution when filling the humidifier chamber as the plastic can be hot. To fill the humidifier chamber, make sure the heater is turned off. Open the compartment on the right side of the heater. Slide the tray from the compartment and remove the water bottle. Fill the bottle with tap water and invert the bottle into the humidity tray. Once the water has filled the tray, refill the bottle a second time and invert it on to the tray. The humidifier is now primed. Slide the tray back in place inside the heater and close the humidifier compartment.
- **Turn off the heater:** Press the power button turn off all the function. The fan will continue to run until all of the heat has been expelled and will then turn off. The Cooling down will show on the LCD display to indicate that the heater is cooling down.

## CARE AND CLEANING

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**CAUTION!** - Disconnect power cord before servicing.

1. Ensure that the heater is turned off (the switch on the back of the unit should be in the **off** position), Unplug the power cord from the wall outlet before cleaning.
2. Carefully wipe the exterior of the heater with a soft, damp (not wet) cloth and dry thoroughly with a soft, dry cloth.
3. Over time dust may accumulate on the front vent of the heater. This can be removed by wiping with a damp cloth, or carefully cleaning using a vacuum cleaner with brush attachment.
4. **Do not use harsh or abrasive cleaners** to clean your heater, as these will damage the surface.
5. Clean the filter every 30 days or as needed.
6. Do not run humidifier without water-this will void the warranty.
7. When filter is visibly dirty, simply remove the filter from the unit, and with a hand-held vacuum, remove the heavy particulate.

### Warning to the User:

Any other service should be performed by a certified electrician specialist or by authorized service representative!

The manufacturer shall not be liable in the event of non-observance of the above instructions!

## BENEFITS

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### **Safety**

The heater has an excellent safety record. It produces safe, clean, economical heat by using an infrared PTC heating element. The unique heater uses a process that virtually prevents wasteful accumulation of heat on the ceiling. These heaters deliver ultimate comfort by keeping the heat virtually even from "head-to-toe".

### **Zone Heating Control**

The heaters provide heat only where and when it is needed. These heaters are less expensive per heated square foot and do not require costly duct installation. The heaters use standard 120 volt current and do not require special 220 volt wiring or a chimney vent.

### **Ultimate Comfort**

The heaters provide even heat distribution and warm floors. The heaters thermostatically control, circulate, and recycle heated air at the floor and maximum use and comfort. The floor to ceiling temperature differential is minimal.

As the heater operates, you will notice the heater's ability to heat does not depend on a high-speed flow of air. Instead, the gentle flow of air promotes more effective heat mixing action and air stability at the floor.

These heaters will not burn, dry out, or otherwise pollute the air with impurities. This protects the humidity level and air quality important to breathing comfort and personal health.

### **Healthy Heat**

The heaters produce heat that is as safe as the infrared rays of the Earth's sun, producing natural outdoor heat indoors. The heater has a low operating and maintenance cost. There are no burners to rust, corrode, adjust, and no pilot light to waste energy. A safe, clean, long life ceramic PTC heating element provides the heat energy. The expected element life is over 80,000 hours. The heaters are constructed of lifetime metals (zincification metal plate and Bronze).

### **Humidifier feature**

By adding vapor mist into the direct path of the heaters grill, the maximum moisture is added to the heaters output. This synergized addition of a cold mist vaporizer adding moisture to the infrared heat output dramatically increases the heat rise and spread as well as producing a super level of therapeutic comfort especially for children and the elderly.

### **Photo Catalytic Oxidation (PCO)**

Super efficient UVC germ killing chamber combined with advanced PCO for the ultimate in sanitizing the air passing through the system for pure clean heated air.

### **3 Power settings**

3 power settings for small/medium/large areas replaces the need for multiple output heaters for maximum energy savings in varying space areas.

## PERFORMANCE SUGGESTIONS

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To assure maximum performance of the heater, please note the following recommendations:

- 1) For best result, do not locate the heater in an area with a high rate of air filtration and movement as the warm air will be exhausted.
- 2) Try placing the heater near a warmer inside wall and direct the output towards a cooler outside wall. The cooler outside wall will tend to draw the generated heat towards itself, which will allow for more efficient heating.
- 3) Placing the heater next to a cold air return will draw the heat away from area to be heated. Try closing or covering the cold air return. This will allow for more efficient heating. Experiment with the placement of the heater to see what works best for you.
- 4) To ensure maximum efficiency, a 40% (minimum) relative humidity should be maintained in the heated environment.
- 5) The heaters are designed to operate for maximum efficiency up to 80-82 degree range. Due to the soft heat concept, temperatures at 68 degrees feel as though it were 72 degrees. This is due to the heat mixing with humidity evenly for "head-to-toe" comfort.
- 6) When the heater is placed in an isolated area, i.e. basement or recreation area, the delivery registers and air return grills of the existing system should be closed in that area if possible.
- 7) Try placing the heater a few feet above the floor in rooms with large areas of bare concrete. Make sure the heater is secure and won't fall. This will allow for more efficient heating since concrete acts as a heat sink and will tend to draw the heat in its direction
- 8) Try lowering your central heating system to a lower temperature and placing the heater in the area you spend the majority of your time. Now set the heater to your comfort level. After all, there is no point to heating multiple rooms to 68+ degrees when not in use.
- 9) When heating larger areas, place the heater in a central location. If a ceiling fan is nearby, try using it at the same time to help distribute the heat evenly. Our suggestion, give it a try and see what works best for you.
- 10) If used in an extremely dirty or dusty area, the filter must be cleaned more frequently as the filter can clog and cause the heater to stop working. Please refer to Page 5 in this manual for cleaning instructions.
- 11) The heater grill is hot when in use. To avoid burns, do not let bare skin touch hot surface. If provided, use handles when moving this heater. Keep combustible materials, such as furniture, pillows, bedding, papers, clothes, and curtains at least three feet from the front of the heater and keep them away from the sides and rear.
- 12) Extreme caution is necessary when any heater is used by or near children or invalids and whenever the heater is left operating and unattended.
- 13) To disconnect heater, turn controls to off, then remove plug from outlet.  
Always unplug heater when not in use.

## QUESTIONS AND ANSWERS

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### **Why does the blower fan not work after I have turned on the heater power button?**

The blower fan will not work until the heating element is hot enough to heat the air passing by. It will work after tens of second.

### **Why does the blower fan keep running after I have turn off the power button?**

The blower fan will continue to run until the proprietary heat chambers have cooled down. After a few minutes the fan will shut off automatically.

### **The heater's airflow seems to have diminished?**

Make sure the rear intake is not blocked and that the filter is clean. Follow the filter maintenance procedure to clean the filter.

### **Once I initially plug the unit in and turn it on, how long will it take to heat my room?**

Generally, it takes less than an hour. Please remember that with any type of heating process there are many variables: size of the room, how well the room is insulated, how many doors/windows, how much bare concrete (which acts as a heat sink with any type of heating), the opening and closing of an exterior door, and the outside temperature etc.

### **Can I use the heater to heat multiple rooms at the same time?**

Yes. Keep in mind the heating will vary based on how open your floor plan is and the sizes of the rooms involved. We have heard back from customers stating that with the help of ceiling fans they have been able to heat multiple rooms simultaneously by placing the unit in a central room. Our suggestion, give it a try and see what works best for you.

### **My home is not insulated very well, will this heater help me?**

Yes, but it will take a little longer to heat the room initially and the outside temperature will also have an impact on heating time.. Once the room has reached the desired temperature it will cycle on and off accordingly.

### **Can the heater be used in a bathroom?**

It is not recommended due to the high level of moisture in a bathroom.

### **Will I be able to use the heater in a basement or garage?**

Yes, but keep in mind that rooms with little insulation will not retain the heat as efficiently. Bare concrete floors which act as a heat sink with any type of heating will absorb some of the heat. Placing the heater a few feet above the floor will allow for more efficient heating.

### **Can I use more than one heater at a time?**

Yes, but you should make sure they are not on the same circuit. Each heater and appliance should be on its own circuit.

### **Can I use the heater on a job/construction site?**

The heater was not designed to be used in a high dust construction environment. Using the heater for this purpose will void your warranty.

### **Can I move the heater around while it is operating?**

It is not recommended to move any portable heater while it is operating. We recommend moving the heater only once the fan has completely turned off.

### **What is the life expectancy for the infrared PTC element?**

Average element life is 80,000 hours.

### **What is zone heating?**

Zone heating is about focusing heat where people spend the most time. After all, there is no point to heating multiple rooms to 68+ degrees when not in use.

### **Can I use the heater and another appliance at the same time?**

Yes, as long as they are not on the same circuit. Zone heaters are considered to be an appliance. You should not run more than one large appliance on a single circuit breaker. Your freezer, refrigerator, microwave oven, washing machine, dryer, and other such appliances should not share a circuit breaker.

### **Can I use an extension cord, surge protector, or power strip with my heater?**

It is not recommended. It is designed to plug directly into a grounded 120 volt 15 amp or higher circuit receptacle. However, if you have to use an extension cord, the cord should be No. 14 AWG minimum size and rated not less than 2000 watts. The extension cord should be a 3 wire cord with a grounding type cord and plug connector.

### **I don't have a grounded outlet; can I use a cord adaptor or remove the grounding plug?**

NO. If you don't have a grounded outlet, contact a licensed electrician in your area for advice. Removing or altering any part of the heater is unsafe and will also void the warranty.

SERVICE

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Is your heater is defective, please contact the following service representatives:

**Best Green Technologies, LLC**  
**PO Box 8026**  
**Charlottesville, VA 22942-8026**

**Tel: 888-424-8432**

**Fax: 406-586-5114**

**E-Mail : [sales@bestgreenllc.com](mailto:sales@bestgreenllc.com)**

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