



SPP-1000-4WC

Introduction

SMART+ PRODUCTS Infrared Heaters utilize the latest infrared heat technology. smart+ products Infrared Heaters provide a safe, convenient, clean, and economical way to distribute heat throughout your home or business without producing deadly fumes or monoxide gases. Our heating system produces therapeutic infrared heat that can potentially relieve symptoms of cardiovascular conditions and inflammatory diseases. Infrared heat technology, in general, produces rays that are safe and highly beneficial to our bodies and health professionals have been using infrared technology for decades to treat muscle and joint pains.

smart+ products Infrared Heaters are constructed of a wood housing. They are equipped with nylon caster wheels for easy mobility. And the highly efficient filter can be maintained and cleaned by simply rinsing with warm water.

Safety

IMPORTANT INSTRUCTIONS



USE CAUTION

Save these instructions because electrical safety is essential to keeping your home safe. When using an electrical appliance, basic precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons. Please adhere to the following safety instructions:

- The heater must be operated by an adult. Keep heater out of the reach of children.
- Only operate the heater when it is on the floor.
- Do not operate heater near any water.
- Do not plug heater into any other cord connected device such as power strip, surge protector, multiple outlet adapter, grounding adapter, outlet-type air fresheners or extension

cords. Plug the heater cord directly into a 3-prong 120V 15 amp grounded circuit receptacle.

- Never plug heater cord into a loose fitting or broken receptacle.
- Never alter the heater's design or operation. Such actions will void warranty and could result in injury and/or death.
- Do not operate the heater if it has a damaged cord or plug.
- Do not operate the heater if there are signs of malfunction. If the heater has been dropped or damaged, do not operate.
- Keep combustible materials such as furniture, pillows and other bedding materials, paper(s), clothing, and curtains at least three feet away from all sides of the heater during operation.
- Always unplug heater when not in use.
- Do not use the heater outdoors.
- Do not run heater cord under carpet. Do not cover cord with throw rugs, runners, or similar coverings. Do not route cord under furniture or appliances. Route cord away from traffic areas.
- Do not use the heater in bathrooms, laundry rooms, or similar indoor locations.
- Turn off heater before unplugging.
- ⚠ Do not insert any foreign object or allow foreign object to enter the ventilation opening or exhaust opening as this may cause electric shock, fire, and/or injury.
- ⚠ Never block the air intake or exhaust opening in any manner as this could lead to fire.
- Do not locate heater, when in use, immediately below a receptacle.
- Never operate heater in or around a bathtub, shower, or swimming pool.
- Only open heater if instructed by an authorized representative of the manufacturer. There are limited user-serviceable parts inside.
- Use heater only as described in this manual. Any other use is not recommended by the manufacturer as it may lead to fire, electric shock, and/or series physical injury or death.

Heater Specifications

SMART+ PRODUCTS Heater Model# SPP-1000-4WC

Carton Size: 19.4 in x 17.1 in x 18.6 in

Heater Size: 15.8 in x 14.8 in x 16.2 in

Net Weight: 32 lbs

Gross Weight: 36 lbs

Cabinet: ¾ ply – Oak

Power Cord: 5.8 ft / 16 gauge

Heat Chamber with Diathermanous Copper Plate

Heating Elements: 4 Infrared Quartz Bulbs w/ Nickel-Chrome Filament

Power Requirement: 120V 15 amp

Heating Elements Life Expectancy Potential: Rated 20,000 hrs

Heat Type: Therapeutic Quartz Infrared Heat

Thermostat: Electronic Analog

Fan System: Cross Flow Fan

Fan Noise Level: 46 db

BTU: 5600

Delayed Start Function

Remote Control

“HI” Function: 1500 watts

“LOW” Function: 750 watts

Electrostatic Washable Filter

Warranty: Limited 1-Year Parts Warranty

How It Works

The smart+ products Infrared Heater works with your in-home furnace to provide supplement heat. In short, room temperature air circulates from the rear of the smart+ products Infrared Heater, passes through a highly efficient filter, enters a chamber that houses the Infrared Quartz Bulbs, and exits as heated air from the Diathermanous Copper Plate constructed on the front of the unit. The smart+ products Infrared Heater ideally heats a room of 500 to 700 square feet, but can be used to heat up a single room size up to 1000 square feet depending on the ambient temperature. And it does all this with a noise level below 46db. The smart+ products Infrared Heater is not for use as the primary/sole heating system.

Components and Functions

- A. The smart+ products Infrared Heater is constructed with Infrared Quartz Bulbs. Each Infrared Quartz Bulb is rated at 375W. These bulbs produce therapeutic infrared rays that warm the air which passes through the inner chamber. The Infrared Quartz Bulbs are constructed with a stainless steel thermal conducting housing. The incorporated twisted style increases the efficiency of the unit.
- B. An AC Cross Flow Fan pushes air over these Infrared Quartz Bulbs. Cross Flow Fans create a wide flow of air using a cylindrical-shaped impeller. Air is drawn inside the smart+ products Infrared Heater, flows along the circumference of the chamber and over the Infrared Quartz Bulbs, and is blown out laterally creating a uniform flow of warm air.
- C. The smart+ products Infrared Heater has a Delay Start Function which controls the AC Cross Flow Fan. The purpose of the Delay Start Function is to allow the Infrared Quartz Bulbs to heat up before the fan begins to circulate the air flow. In addition, the AC Cross Flow Fan will continue to circulate the airflow after the power is turned off to circulate the warm air from the smart+ products Infrared Heater cooling the unit down.
- D. The air flow exits through the front of the smart+ products Infrared Heater. It travels from the Diathermanous Copper Plate. The Diathermanous Copper Plate is constructed from red copper making it advantageous for efficient thermal conductivity. It is a resourceful material in reflecting the infrared rays.
- E. The LED Digital Display is a convenient, stylish, and modern way to display the set temperature and time. This attractive addition compliments the smart+ products Infrared

Heater, in that, it simplifies and makes controlling the unit easy. Operating the heater is logical and can be done on the unit itself or by remote.

Unpacking the SMART+ PRODUCTS Infrared Heater

1. First, check the carton to make sure there are no obvious damages that may have occurred during shipment.
2. Open the smart+ products Infrared Heater packaging and remove the heater by sliding it from the box. You may want to gently and cautiously turn the entire box upside down letting the heater slowly slide out.
3. Remove all the protective materials from the heater. It may be a good idea to keep the protective materials and packaging for storage during the off-season.

Operating Instructions

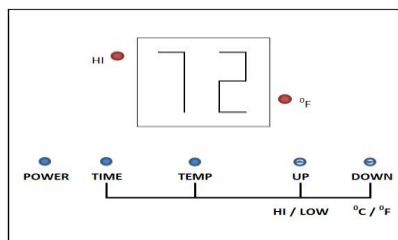
⚠ Visually inspect the smart+ products Infrared Heater for any damages before operation. Do not operate the heater if any damages are detected. Contact your dealer immediately.

NOTE: “UP” and “DOWN” arrow buttons on the control panel and remote control have dual function capabilities.

 **Adjust TIME / TEMP with up arrow or adjust HI / LOW settings.**

 **Adjust TIME / TEMP with down arrow or adjust °C/°F settings.**

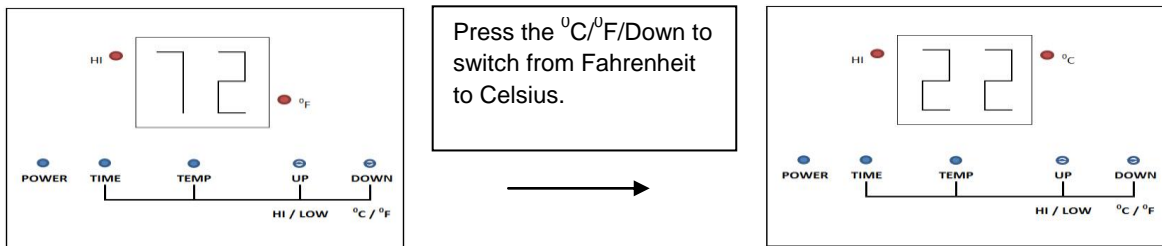
- 1) Plug the power cord directly into a conventional 120V 15 amp outlet and press the MASTER POWER switch on the rear of the portable heater. Then press the POWER button on the front control panel or on the remote to start the unit. The LED display will show the default value as 72°F/22°C.



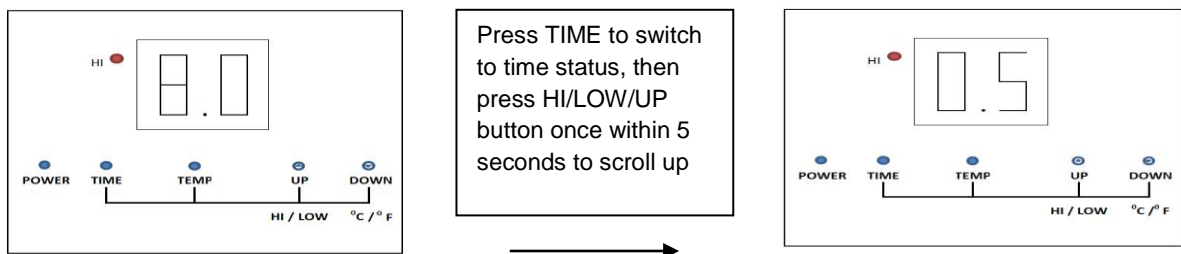
Function Display

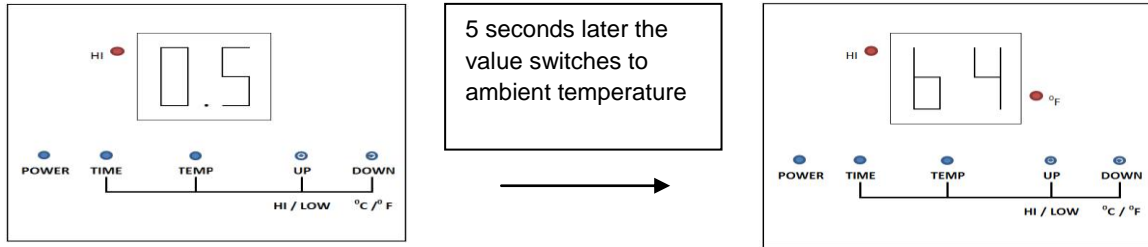
(Note: If the current ambient temperature is greater than the set temperature, the HI/LOW display, fan, and Quartz Bulbs will not operate.)

- 2) By pressing the °C/°F/Down button, you can switch the temperature format from Fahrenheit to Celsius and vice versa.

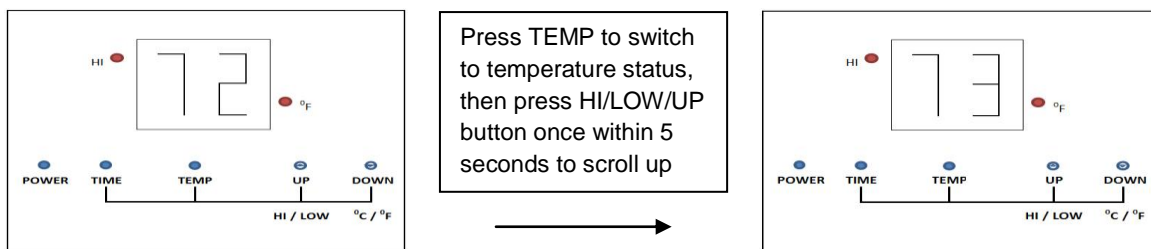


- 3) By pressing the TIME button, the LED display will switch from the temperature status to the TIME status and begin to flash. The default time will display "--". This means that the TIME is not activated and, therefore, the heater will remain on. You must press the HI/LOW/UP button or the °C/°F/DOWN once again within (5) seconds to set the time. Each time you press the HI/LOW/UP button, the time will increase by 0.5 Hr. If you press the °C/°F/DOWN button, the time will decrease by 0.5 Hr. The maximum value for time is 8.0 Hr. By holding down the HI/LOW/UP button or °C/°F/DOWN for (2) seconds, the number rotation will cycle more quickly. If you do not press the HI/LOW/UP button or °C/°F/DOWN within (5) seconds, the time status will switch back to the temperature status.

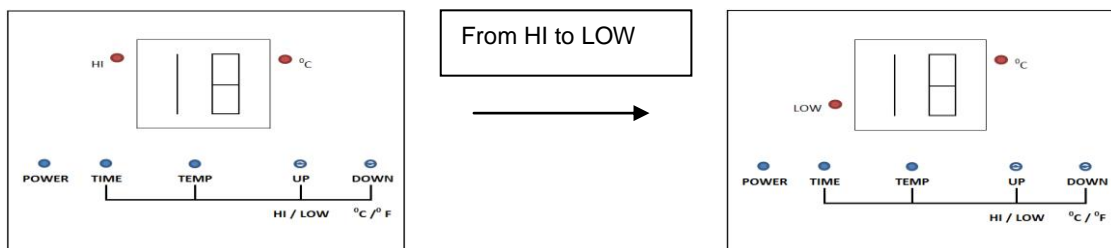




- 4) Again, the default set temperature displayed on the LED display is 72°F. By pressing the TEMP button, the LED display will switch to the temperature status and flash. You must press the HI/LOW/UP button or °C/°F/DOWN button once again within (5) seconds to set the desired temperature. Each time you press the HI/LOW/UP button, the temperature setting will increase by 1°F. Press the °C/°F/DOWN button and the time will decrease by 1°F. The maximum temperature setting is 86°F (30°F). If you hold the HI/LOW/UP button or °C/°F/DOWN button for (2) seconds, the number rotation will cycle more quickly.



- 5) Press the HI/LOW/UP button to switch from HI (rated at 1500W) to LOW (rated at 750W). The default setting is HI.



- 6) To find the ambient room temperature, hold down the TEMP + TIME and then let go. The ambient temperature will be displayed. To calibrate temperature setting, hold down the TEMP button for (5) seconds to switch to thermostat calibration status. The LED display

will begin to flash. The default setting on the display is 00. The °F or °C LED light will illuminate. Press HI/LOW/UP or °C/°F/DOWN button to scroll up and down for the correct calibration. The displayed temperature should match your wall or free-standing thermometer within (2) degrees. Once the desired temperature is set, press TEMP again to save your settings.

(Note: Make sure you understand the difference between the **set/desired** temperature and the **ambient** room temperature readings on the heater. The **set/desired** temperature reading is defaulted to 72 degrees Fahrenheit. You see this displayed when you first turn on the heater. The **set/desired** temperature reading has nothing to do with calibrating the heater. The **ambient** temperature is what the heater believes to be the current room temperature. To find the **ambient** room temperature, you must push the temperature button + time button and let go quickly. This will display the ambient room temperature and this is the temperature you want to match your home thermostat reading (primary heating device). The ambient room temperature on the heater is what needs to be calibrated. For example, if your home thermostat says 70 degrees Fahrenheit and the heater has an **ambient** room temperature reading of 75 degrees Fahrenheit, you will need to calibrate the heater to -5. Please keep in mind that if your home thermostat temperature sensor is in a different room, there may always be a few degrees variance between it and the heater. Now the heater will read the current room temperature 75 degree Fahrenheit as well.)

(Note: To set back to factory settings, hold down the TIME button for (5) seconds. This will set all values back to default.)

- 7) The smart+ products Infrared Heater can be turned off by pressing the POWER button. DO NOT TURN OFF THE **MASTER POWER SWITCH ON THE REAR OF THE HEATER OR UNPLUG THE HEATER UNTIL THE FAN SHUTS DOWN**. If the heater is left on using the TIME function, there will be (5) second sound alert to let you know that the time is expiring. If no actions are taken, the heater will shut off.

Recommendations for Maximum Performance

1. Be sure not to place the heater in an area where the air flow or air movement is great.
2. Direct the outflow towards the center of the room and not against a solid structure, like a wall for example. For larger areas, place the heater within a central location.
3. The smart+ products Infrared Heater is designed for maximum efficiency in the 68⁰ F to 74⁰ F range. This is because of the ambient air moving through the heater and out constantly.

4. Existing HVAC heating system vents should be closed. This allows the heater to function in an isolated area.
5. It is not recommended to operate heater in areas exposed to non-insulated concrete or metal walls. Concrete floors should be covered to insulate the heat within the room.
6. If the heater filters become dirty or dusty, they must be cleaned for the heater to operate at its maximum efficiently.

Care, Maintenance, and Storage

Before care or maintenance is applied, always unplug the cord from the receptacle. The cabinet housing can be wiped down with water and a damp cloth or with furniture polish. The heater has a washable filter. The filter should be cleaned regularly to provide for maximum performance. Once the filter is removed, run warm water through and over the filter to remove dirt and dust. Shake all water residue from the filter and replace it back in the heater. (Note: A mild soap can be applied to assist in removing dirt and dust from the filter)

If the heater is not to be used for an extended period of time, it can be stored away. Make sure the power is turned off and the cord is unplugged from the receptacle. Wrap the cord around the handle on the rear of the portable heater. Cover the heater to prevent dust from accumulating on the heater. You may want to repack it back in its original carton. Always store the heater in a dry and dust free environment.

(Note: You may want to clean the filter prior to storing the heater away so that it is ready for operation the next time it is put in use.)

Troubleshooting

1. PROBLEM:

- a. If the Heat Emitter is broken or damaged
- b. If the Control Panel is not responding, the temperature reading is above 86⁰F/30⁰C, or there is a burning odor coming from the portable heater
- c. Or if the power cord is damaged

SOLUTION: Contact the manufacture immediately. **DO NOT** attempt to operate the portable heater as this may cause electric shock, fire, and/or injury.

2. PROBLEM:

- a. The amount of heated air exiting the front of the portable heater is reduced.

SOLUTION: Check the electrostatic filter to make sure it is free of dust and dirt. Also check the front grill and rear air intake to make sure it is not being blocked by any kind of debris.

3. PROBLEM:

- a. The portable heater will not turn on.

SOLUTION: First, test your outlet to make sure it has power. You can do this by plugging in another appliance and turning the appliance on. Secondly, check the LED display to see if it is flashing. If this is the case, press the POWER button to turn off the TIME and resume normal operation of the portable heater. Third, check the power switch to see if it is lighting up. If the outlet does have power, the LED display is not flashing, or the power switch is not lighting up, then contact the manufacturer immediately for further troubleshooting.

4. PROBLEM:

- a. The portable heater continues to operate even when the power switch is turned off.

SOLUTION: Do not unplug. The portable heater has a fan that will continue to operate even when the power switch is turned off. This fan continues to run in order to cool down the portable heater. Once the fan stops running, you can then unplug the portable heater.

5. PROBLEM:

- a. The control panel displays no temperature or TIME.

SOLUTION: First, check to make sure the power cord is not damaged, is plugged in, and the outlet has power. Secondly, check to make sure the control panel is not damaged. If the control panel display continues to be inoperable, contact the manufacturer for further troubleshooting.

6. PROBLEM:

- a. The control panel is displaying a temperature and TIME, but the portable heater does not operate.

SOLUTION: The Signal Cable or other relevant plugs may have become disconnected. Please contact the manufacture for further troubleshooting.

7. PROBLEM:

- a. The heat emitter is functioning and the air outflow is working, but the temperature displayed on the LED panel does not increase.

SOLUTION: The temperature sensor may be damaged or has become disconnected. Please contact the manufacture immediately for further troubleshooting.

8. PROBLEM:

- a. The display shows “Er”. This error code means the heating system is not working correctly.

SOLUTION: Contact the manufacturer immediately. **DO NOT** attempt to operate the portable heater as this may cause electric shock, fire, and/or injury.