Bio Smart Technologies

BioSmart® On-Wall Far Infrared Heaters. *Feel the Difference.*

BIOSMART®
Therapeutic Infrared Heat

BioSmart®
Owner's Manual

Therapeutic infrared heating systems for a green, healthy environment

Save these Instructions

Includes:

- Application Guidelines
- User Information & Guidelines
- Operating Instructions
- Warranty & Servicing

For BIO-1500PC Classic series and Model BIO-1500PB Basic Edition

BioSmart® BIO-1500PCP
Premium Classic

BioSmart® BIO-1500PB
Basic Edition

Table of Contents

Congratulations on Your Purchase!

Congratulations on purchasing your
BioSmart® Therapeutic Quartz Far Infrared Heater!

One of the best things about using your new BioSmart® Therapeutic Quartz Far Infrared Heater is the money you will save on gas and electric bills.

Utility field tests show that BioSmart® Quartz Far Infrared Heaters use an average of 35% less energy than conventional electric furnace/baseboard systems. And with current fuel prices, BioSmart® heaters will save you even more money than if you were using heating oil or gas heat.

That means drastic reductions in your heating bills -- up to 50%, depending on the type of heating system you have currently installed.

BioSmart® Infrared Heaters are giants of unparalleled efficiency. The far infrared heating technology utilized in the heaters warm the objects in the room, as well as the walls and floor. Everything in the room is evenly heated, from top to bottom. The heat in the room will never hover uselessly near the ceiling again!

In addition to helping you keep money in your pocket, your BioSmart® goes a step beyond to also enhance your health and the quality of comfort you experience in the heated room. The far infrared quartz heating system will not burn, dry out, or otherwise pollute the air with impurities. This protects the natural humidity level and produces a soft, ion-balanced heat. Using this soft far infrared heat is a better, more comfortable and more healthy way to heat a room.

There are also many therapeutic benefits that can be attributed to far infrared heat. Its use as an integral part of many medical therapies is well documented. Now you can enjoy the benefits of therapeutic far infrared heat with the BioSmart® Quartz Far Infrared Heater.

Please read the operating instructions carefully for safe and optimum enjoyment of your new BioSmart® Therapeutic Quartz Far Infrared Heater.

Thank you for your purchase!

BioSmart® Infrared Heaters.
Live in Comfort.

BioSmart Technologies

Why Use a BioSmart® Heater

What is Infrared Heat & How Does it Work?
Infrared heat, by virtue of its shorter wave length, is able to penetrate solid objects faster than radiant heat. The advantages of infrared heat have been utilized for years as a therapeutic treatment for cardiovascular and general circulation problems.

Comfort Levels & Therapeutic Benefits of Far Infrared Heat
BioSmart® heats the room evenly from floor to ceiling. Homes and offices with high ceilings are not affected by the difference in heat displacement between the floor and ceiling. In other words, the temperature on the floor and at the ceiling remains the same without any supplemental fan circulation to keep the temperature balanced throughout the room.

The comfort levels achieved when using far infrared heat are superior to those of radiant heating systems. Far infrared heat warms the body faster so the energy that flows into the body is greater than when being absorbed from conventional radiant heating sources. Room temperatures of 68 degrees (F) with far infrared heat feel like 72 degrees (F), so you can set the thermostat back 4-5 degrees and experience the same comfort levels utilizing less energy to keep you warm and cozy.

BioSmart® heating systems are the ultimate in green technology engineering -- exceptionally economical & extremely quiet, they produce comfortable, healthy, therapeutic far infrared heat. BioSmart® heating systems also purify the air that is processed through them, making them a sanitary source of heat for those suffering from respiratory conditions.

Problems with HVAC systems: With the intent of economizing and saving on building costs, contractors will combine the heating & air conditioning ducts into one distribution system. This makes the cross-contamination issue through the air conditioning ducts a potential health problem, especially for those with respiratory sensitivities and allergies, including asthma.

Producing far infrared heat requires localized generation of the infrared wave in order to optimize the efficiency and money/energy savings produced when using a portable far infrared heating source. This design advantage eliminates the need for a ductwork system to distribute the heat through various rooms of a home or office. Eliminating ductwork also eliminates the bacteria, dust, pollen and mold the accumulates in a conventional air conditioning and heating duct system.

Energy Savings Benefits
Far infrared waves are transferred quickly throughout the room due to their shorter wave length. The results are impressive because it requires less energy to heat the room evenly with far infrared heat than with other conventional heating sources. This makes far infrared heat the most cost-

efficient solution for a supplemental heating source for heating your entire home. If you really want to save on energy costs, the cost of heating with BioSmart® far infrared heat is going to be spectacular.

Quiet Operation
BioSmart® heating systems operate virtually silently, depending on the model. They are quieter than forced air systems and they do not have the typical cracking and popping sounds heard when heating with baseboard heaters. Noise levels for BioSmart® fans are much quieter than the typical 65 dB for other comparable portable heaters.

Accurate Temperature Regulation
BioSmart® portable heaters utilize state of the art electronics and internal electronic thermostats for pin-point, one-degree accuracy. That means more accurate control of comfort level settings and a warm, comfortable environment for you and your family.

Cost-Effective
Components in BioSmart® portable heaters are designed to last 3 times longer than in conventional heating systems. BioSmart® warranty coverage and service procedures are simple to follow and they can be serviced usually in 5 minutes or less, should repair be required.

Stylish & Functional
BioSmart® heaters are stylish and functional with a modern contemporary design, making them an attractive addition to any room. There are several different models to choose from to match the decor of your home or office.

Patented Proprietary Technology
BioSmart® heaters contain a proprietary, high-efficiency far infrared heat exchanger which produces more far infrared heat her kilowatt than conventional ceramic or carbon plates. Patent pending coverage of more than 30 distinct features in the BioSmart® heater are what makes the BioSmart® technology a truly unique energy efficient heat source for your home or office.

Quality Assurance
BioSmart® heating systems come with C-TUV-US certifications representing equivalent approvals both in UL and CSA classifications. BioSmart® heaters are manufactured in Taiwan and China through True Green Electronics, which includes a consortium of engineers, vendors and manufacturers including AcePower Electronics, a certified ISO 9000 manufacturer and the exclusive manufacturer for True Green Electronics heaters and air purifiers.

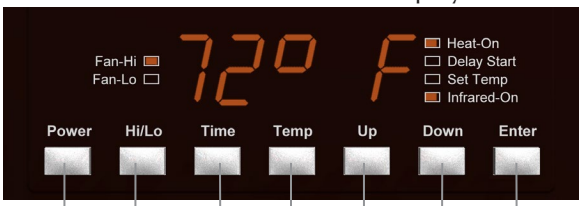
BioSmart® Heater Features & Functions

BIO-1500PC Series

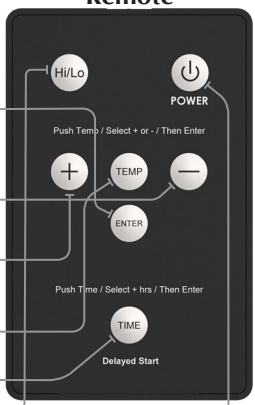
Front of Heater

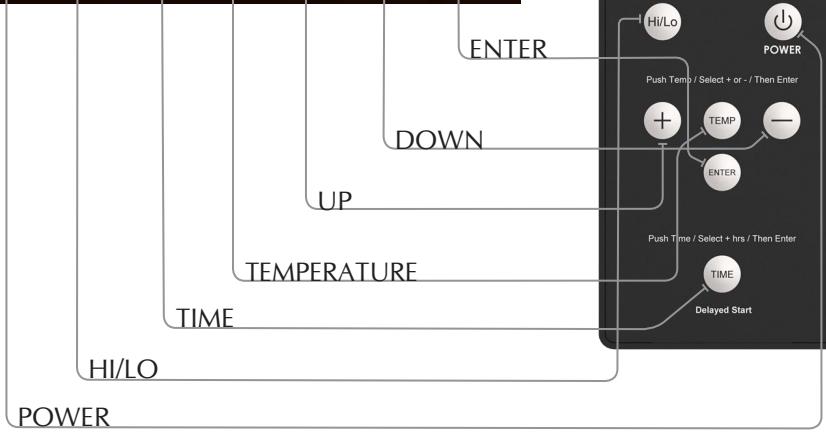
Back of Heater

*Control Panel & LED Display



Remote



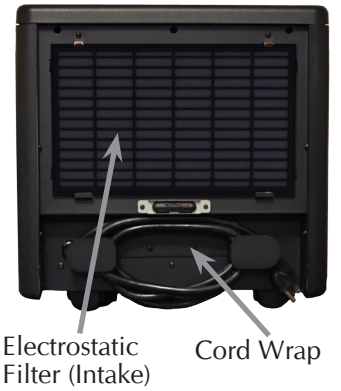


BioSmart® Heater Features & Functions

Model BIO-1500PB

Front of Heater

Back of Heater



*Control Panel & LED Display

WARNING

IMPROPER USE OF THIS HEATER COULD RESULT IN RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

CAUTION

RISK OF ELECTRIC SHOCK. DO NOT OPEN WITHOUT UNPLUGGING UNIT FIRST!

USE RESTRICTIONS

READ ALL INSTRUCTIONS BEFORE USING THE HEATER

- 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 into a 3-prong 120V 15 amp or higher grounded circuit receptacle only.
- DO NOT plug the heater into a loose fitting or broken receptacle.
- DO NOT alter the heater's design, or you will void the warranty.
- DO NOT block the front or rear of the heater.
- DO NOT place anything directly in front of the heater.
- DO NOT cover the unit as this may block airflow and cause the heater to malfunction.
- DO NOT use the heater outdoors or for heating construction sites.
- DO NOT locate the heater where it may fall into a bathtub or other water container.
- DO NOT force the filter to dry using any alternative methods when performing filter maintenance; doing so could damage the filter.
- DO NOT run cord under carpeting.
- DO NOT cover cord with throw rugs, runners, or similar coverings. Arrange cord away from traffic area and where it will not be tripped over.
- 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.
- Heater has hot and arcing or sparking parts inside. DO NOT use it in areas where gasoline, paint, or flammable liquids are used or stored.
- Heater is hot when in use. To avoid burns, do not let bare skin touch hot surfaces. If provided, use handled when moving this heater.
- DO NOT operate any heater with a damaged cord or plug or after the heater malfunctions, has been dropped or damaged in any manner. Return heater to authorized service facility for examination, electrical or mechanical adjustment, or repair.
- To disconnect heater, turn controls to off, then remove plug from outlet.
- Connect to properly grounded outlets only.
- 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.
- Use this heater only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electrical shock, or injury to persons.
- Avoid the use of an extension cord because the extension cord may overheat and cause a risk of fire.
- This heater is for use on 120 volts. The adapter should not be used if a three-slot grounded receptacle is available.
- Heater must not be located immediately below a socket-outlet.

SAVE THESE INSTRUCTIONS

Unpacking Your New BioSmart® Heater

1. INSPECT the package for any obvious damage.

2. UNPACK the heater: cut open taped box edges, fold back box flaps. Gently turn entire box upside down; lift box from protective packaging.

3. REMOVE the protective packaging materials and turn upright; find a level and unobstructed location to place the unpacked heater. (*NOTE: Keep the packaging for off-season storage and any transportation in the unlikely event that servicing is required.)*

4. PLUG the power cord directly into an unused, grounded 120 volt, 15 amp or higher circuit receptacle.

5. PRESS the POWER button, located on the control panel. The heater's temperature setting will show 72° F on the display. (To switch between Celsius and Fahrenheit on the 1500PCPremium, press DOWN & ENTER simultaneously and hold for 3 seconds.)

Heater Care & Storage

General Maintenance and Cabinet Care
Clean the filter often to provide for maximum performance. When necessary, wipe the cabinet clean with a soft damp cloth and/or furniture polish.

Heater Storage
When the heater is not being used for an extended period of time, observe the following steps to preserve the life and performance of the unit:

- Unplug heater (Do not unplug heater while heater is running. Please see Operating Instructions - Turning Power Off.) - this will also help you conserve energy in your home or office.
- Gently wrap the power cord into the cord storage compartment in the back of your heater. This will help prevent undue wear and tear on the cord.
- Cover the heater to prevent dust from accumulating on or in heater.
- Store heater in a dry, low dust environment.

NOTE: Before resuming use of heater, ensure the filter and front grill are clean and clear of all dust and dirt. Also, observe the entire length of the power cord to ensure no damage has compromised the integrity of the cord.

Suggestions for Best Performance

To assure maximum performance of your BioSmart® heater, please review the following recommendations:

- Do not locate the heater in an area with a high air exchange rate in and out of the room. Heat produced should be contained in the room.

- Try placing the heater near a warmer inside wall and direct the output toward a cooler outside wall. The cooler outside wall will tend to draw the generated heat towards it, which will allow for more efficient heating.

- Placing the heater next to a cold air return will draw the heat away from the 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.

- To ensure maximum efficiency, a 30% minimum relative humidity should be maintained in the heated environment. This is usually not a concern.

- The heater is designed to operate for maximum efficiency in the 68-74 degree range. Due to the soft heat concept, as explained earlier, temperatures at 68 degrees F feel as though it were 72 degrees F. This is due to the heat mixing with humidity evenly for head-to-toe comfort.

- When the heater is placed in an isolated area, i.e. basement or recreation area, any existing HVAC heating system vents should be closed in that area, if possible. This allows the heater to maintain the isolated area more efficiently.

- If placing the heater a few feet above the floor, such as 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. Optimally, concrete floors should be covered to provide some insulation factor from the concrete.

- Set your central heating system to a lower temperature. Place the heater in the area where you spend the most of your time. Now set the heater to your comfort level. There is no point in heating multiple rooms to 68+ degrees F when not in use.

- When heating larger areas, place the heater in a central location.

- If the heater is used in an extremely dirty or dusty area, the filter must be cleaned more frequently to maintain heater performance.

Operating Instructions at a Glance

Turning Power On
Press the POWER button on the left side of the Control Panel. The heater's quartz heating elements will light up inside the heater. After a few minutes, once the air within the heater is warm, the heater fan will begin to operate.

Turning Power Off
Press the POWER button located on the left side of the Control Panel. The sound of the heater fan will continue until the heat has been completely vented, thus protecting the unit and preventing waste by cycling the remaining heat into the room. (NOTE: DO NOT unplug the heater until the sound of the fan has stopped. Doing so may cause damage to the unit.)

Setting the Temperature
This feature allows you to set the temperature that your heater will maintain.

- 1500PC Series: Press the temperature (TEMP) button on the Control Panel; the SET TEMP indicator will illuminate and the temperature display will flash. Use the UP and DOWN buttons to select the temperature and press the ENTER button. The SET TEMP light will turn off.

- 1500PB: Press the POWER button to turn the heater on. Press the UP or DOWN button to move the temperature to the desired setting.

Setting the Timer (PC Series only)
This feature allows you to set a future time for the heater to turn itself on. For example, if you set the time for 1 hour, the heater will turn on in 1 hour.

1. Turn the power off (heater must be powered off to use the timer feature).
2. Press the TIME button on the Control Panel—the two zeros to the right will flash (:00), and the DELAY START indicator will illuminate.
3. Press the UP or DOWN button to select desired number of minutes (up to 59 minutes) that you would like the heater to wait to turn itself on.
4. Press the ENTER button—the two zero buttons to the left will flash (00:), indicating 0 hours have been set.
5. Press the UP or DOWN button to the desired number of hours (up to 24 hours), and then press the ENTER button.
6. DELAY START indicator will flash until the unit comes on after waiting the period of time you have set.
7. To cancel the timer, press the POWER button and the timer will stop.

Switching Between Fahrenheit & Celsius
PC Series: Press and hold the DOWN & ENTER buttons for about 3 seconds.
1500PB: Press and hold the POWER & DOWN buttons.

Detailed Operating Instructions (1500PC)

Turning Power On

1. Press the POWER button on the left side of the Control Panel. The heater's quartz heating elements will light up inside the heater.

2. After a few minutes, once the air within the heater is warm, the heater fan will begin to operate.

Turning Power Off

1. Press the POWER button located on the left side of the Control Panel. DO NOT UNPLUG, read further:

2. The sound of the heater fan will continue until the heat has been completely vented, thus protecting the unit and preventing waste by cycling the remaining heat into the room. (DO NOT unplug the heater until the sound of the fan has stopped. Doing so may cause damage to the unit.)

Setting the Temperature

This feature allows you to set the temperature that your heater will maintain.

1. Press the temperature (TEMP) button on the Control Panel; the SET TEMP indicator will illuminate and the temperature display will flash.
2. Use the UP and DOWN buttons to select the temperature, press ENTER.
3. The SET TEMP light will turn off, and the temperature is now set.

*Control Panel & LED Display

Detailed Operating Instructions (1500PC)

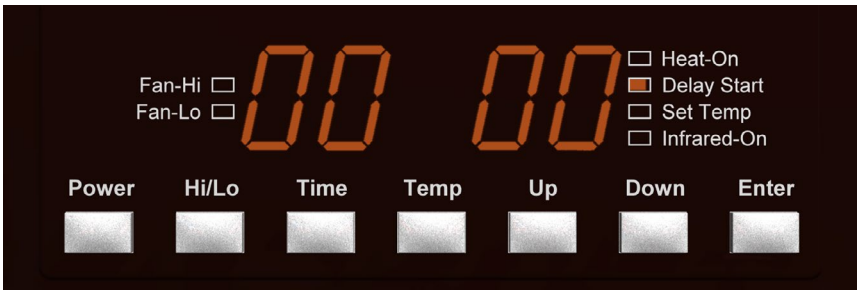
Setting the Timer

This feature allows you to set a future time for the heater to turn itself on. For example, if you set the time for 1 hour, the heater will turn on in 1 hour.

1. Turn the power off (heater must be powered off to use the timer feature).
2. Press the TIME button on the Control Panel—the temperature setting that the heater will turn on at will appear. Press the TIME button again -- two zeros to the right will flash (:00), indicating 0 minutes have been set, and the DELAY START indicator will illuminate.
3. Press the UP or DOWN button to select desired number of minutes (up to 59 minutes) that you would like the heater to wait to turn itself on.
4. Press the ENTER button—the two zero lights to the left will flash (00:), indicating 0 hours have been set.
5. Press the UP or DOWN button to the desired number of hours (up to 24 hours), and then press the ENTER button.
6. DELAY START indicator will flash until the unit comes on after waiting the period of time you have set.
7. To cancel the timer, press the POWER button and the timer will stop.

Switching Between Fahrenheit & Celsius

Press the DOWN & ENTER buttons simultaneously and hold for about 3 seconds. The display will update automatically.



Detailed Operating Instructions (1500PB)

Turning Power On

1. Press the POWER button on the left side of the Control Panel. The heater's quartz heating elements will light up inside the heater.

2. After a few minutes, once the air within the heater is warm, the heater fan will begin to operate.

Turning Power Off

1. Press the POWER button located on the left side of the Control Panel. DO NOT UNPLUG, read further:

2. The sound of the heater fan will continue until the heat has been completely vented, thus protecting the unit and preventing waste by cycling the remaining heat into the room. (DO NOT unplug the heater until the sound of the fan has stopped. Doing so may cause damage to the unit.)

Setting the Temperature

This feature allows you to set the temperature that your heater will maintain.

1. Press the POWER button on the Control Panel to turn the heater on.
2. Press the UP or DOWN button to move the temperature to the desired setting.

Switching Between Fahrenheit & Celsius

1. Press the POWER & DOWN buttons on the Control Panel simultaneously and hold for about 3 seconds. The display will update automatically.

*Control Panel & LED Display

Maintenance Instructions

The only maintenance that is required for the heater is the periodic cleaning of the heater's electrostatic filter (located at the back of the unit). This cleaning should be performed at least once a month, or as dust becomes visible on the filter, to ensure efficient operation of the heater.

Cleaning the Electrostatic Filter

1. Power the heater off by pressing the POWER button, located on the left side of the Control Panel. (NOTE: The sound of the heater's fans will continue until the heat has been completely vented, thus protecting the unit and preventing waste by cycling the remaining heat into the room.)

   **DO NOT unplug the heater until the sound of the fan has stopped, doing so may cause damage to the unit.

2. When the heater's fans have stopped (the heater will become completely silent), unplug the heater .

3. Release the electrostatic filter by pushing the filter up from below (Figure 1).

4. Remove the electrostatic filter by pulling the filter down and out (Figure 2).

5. Clean the filter by vacuuming the filter until clear.

6. Replace the filter by sliding the top upwards into the spring-loaded slot on the back of the heater, then gently press the bottom of the filter into place.

Figure 1

Figure 2

Frequently Asked Questions

Q. Why is my heater still running after I have turned it off?
A. You will hear the heater fan running after you have turned the power off—this is to allow the heater to cool down, protecting the unit's components from overheating. Please take care to not unplug the heater while it is in operation and while it is running the cool-down cycle.

Q. Can I use the heater to heat multiple rooms at the same time?
A. The heating capability will depend on your floor plan, the insulation factor and the room size. Ceiling fans will help move heat around in rooms with many large windows but normally this is not necessary. Placing the heater in a central location will also help move heat between rooms.

Q. Will my heater work in damp or moist areas?
A. Using the heater in a damp or moist area such as a bathroom, pool room, or sauna room is effective but not recommended for the heater unless in constant use. Although the heater is designed to work effectively with natural humidity, we suggest you keep the heater away from areas that accumulate moisture.

Q. Will my heater work in areas without insulation?
A. The heater will work in garages, basements and unfinished rooms. However, please bear in mind that the effectiveness of your heater depends on how well the area is sealed and insulated. As with any heater, the better the walls, floor and ceiling are sealed and insulated, the more heat is absorbed into the objects in the room.

Q. Why is my heater's display showing only a line of dots?
A. The heater goes to a screen saver mode 3 minutes after you finish setting it. Your heater will activate the heat cycle automatically when the temperature of the room falls below the temperature you set. The heater will also pop out of screen saver mode when any button is pressed on the Control Panel. Screen Saver mode does not affect normal operation.

Q. Can I use multiple heaters in an area?
A. Depending on the size of the area, you may wish to use multiple heaters. Your heater is rated at 12.5 amps so each heater must plug into an independent 15 amp, or greater, circuit.

Q. How does the BioSmart® Heater save me money?
A. The patented quartz heating elements in the BioSmart™ produce infrared heat waves which heat objects in the room quicker than conventional radiant heat waves. Using this type of heat can save up to 50% on your heating bill.

Troubleshooting Your BioSmart® Heater

Problem	Solution
Heater's airflow is reduced.	Make sure the electrostatic filter is clean (see Maintenance). Check front grill and look behind rear air intake for any objects that could obstruct airflow. If the heater's airflow is still diminished or has stopped, please call Customer Support.
The heater stays on after I push the Power button to turn it off.	This is a normal function of the heater. DO NOT unplug the heater until you no longer hear the fan running. During this time, the heater is cooling down.
The heater's display is showing a line of dots.	This is part of the heater's normal operation. After a period of inactivity, the heater will enter into a "screen saver" mode to conserve power. This will not affect the heater's operation. When any function key is pressed, the heater's display will reappear.
Heater thermostat temperature does not match wall thermostat temperature	Follow the directions for internal thermostat calibration. (See "Calibration Procedure for the Thermostat" on page 22)
The heater will not turn on.	Test the outlet to make sure there is power available and then check the heater display for the flashing TIME DELAY light (1500PC). Press the POWER button to turn off the timer and resume normal operation of the heater.

BioSmart® Heater Specifications (1500PC)

Model BIO-1500PC, PCP, and PCB

BIO-1500PCP

- **Cabinet:** ABS 94-VO fire retardant nylon/ plastic—black with silver trim
- **Weight:** 21 lbs
- **Dimensions:** 14" x 13 ½" x 16 ½" (HxWxD)
- **Power Requirements:** 120 Volt AC
- **Power Consumption:** 12.5A, 1500W
- **Power Cord:** 6 ft - 14 gauge
- **Control Panel:** Digital – large numbers
- **Thermostat:** Three probe – Electronic
- **Thermostat Accuracy:** ±1° (1 degree up and 1 degree down)
- **Delayed Start Function:** Up to 24 hours
- **Automatic Restart feature in case of a power outage.**
- **Safety Cut-Off:** Yes
- **Listed Approvals:** C-TUV-US (International UL Equivalent)
- **Remote Control:** Credit card type—large button surface
- **Cord Storage:** Yes
- **Pre-Filter:** Life-time electrostatic
- **Heating Elements:** 4 - 120 volt quartz far infrared tubes
- **Quartz Life Expectancy:** 30,000 hours per heating element
- **Heat Chamber:** Copper-Ion generation panels with ceramic insulation plates at the top and bottom of the heating chamber to help increase the temperature inside the heating chamber; also acts as noise mufflers.
- **Fan System:** High-output, ball-bearing laminar-flow fan.
- **Fan Noise Level:** 42 dB
- **Warranty:** Limited 3-Year Warranty

BioSmart® Heater Specifications (1500PB)

Model BIO-1500PC, PCP, and PCB

BIO-1500PB

- **Cabinet:** ABS 94-VO fire retardant nylon/ plastic—black with simulated wood trim
- **Weight:** 21 lbs
- **Dimensions:** 14″ x 13 ½″ x 16 ½″ (HxWxD)
- **Power Requirements:** 120 Volt AC
- **Power Consumption:** 12.5A, 1500W
- **Power Cord:** 6 ft - 14 gauge
- **Control Panel:** Digital – large numbers
- **Thermostat:** Two probe – Electronic
- **Thermostat Accuracy:** ±1° (1 degree up and 1 degree down)
- **Delayed Start Function:** N/A
- **Safety Cut-Off:** Yes
- **Listed Approvals:** C-TUV-US (International UL Equivalent)
- **Remote Control:** N/A
- **Cord Storage:** Yes
- **Pre-Filter:** Life-time electrostatic
- **Heating Elements:** 4 - 120 volt quartz far infrared tubes
- **Quartz Life Expectancy:** 30,000 hours per heating element
- **Heat Chamber:** Copper-Ion generation panels.
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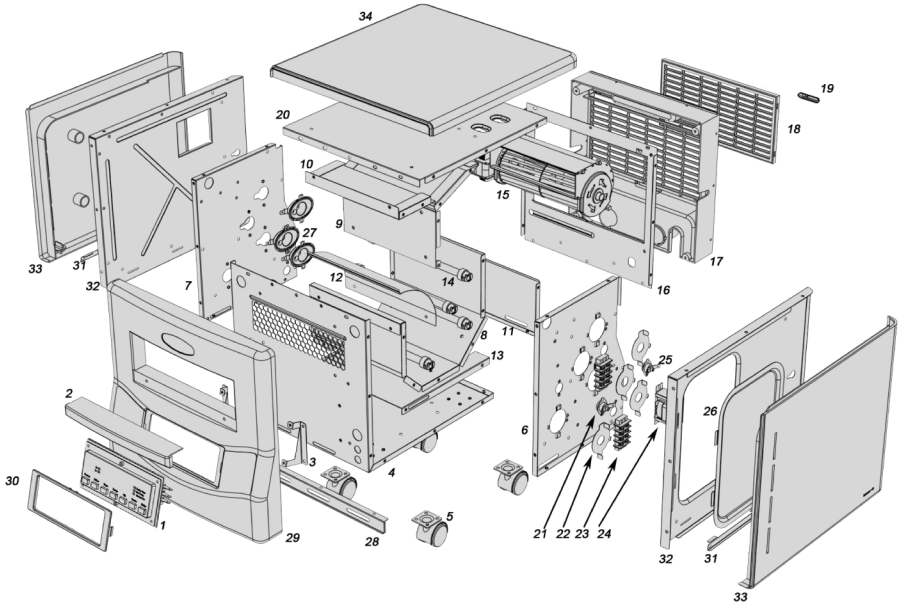
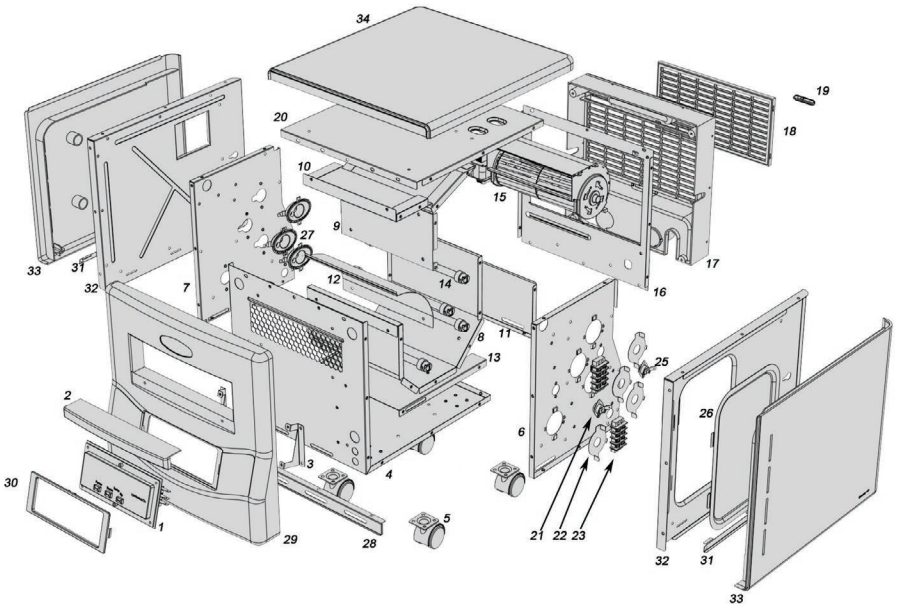
Diagram of BioSmart® Heater (1500PC Series)



Parts List

1. Control Panel
2. Register Trim Piece
3. Control Panel Support (x2)
4. Main Sheet Metal Body
5. Caster Wheel (x4)
6. Heat Exchanger Right Side
7. Heat Exchanger Left Side
8. Heat Exchanger Bottom
9. Heat Exchanger Divider
10. Heat Exchanger Top
11. Heat Exchanger Back
12. Copper Baffle
13. Heat Blanket Support
14. Infrared Heating Element (x4)
15. Cross Flow Fan
16. Rear Sheet Metal Panel
17. Rear Plastic Cover
18. Electrostatic Filter
19. Temp Sensor Cover
20. Top Sheet Metal Panel
21. High Limit Switch
22. IR Bulb Cover (x4)
23. Terminal Block (x2)
24. Transformer
25. Temp Sensor
26. Access Panel
27. IR Bulb Socket (x4)
28. Cover Sealer
29. Front Plastic Cover
30. Control Panel Trim
31. Plastic Cover Rail (x2)
32. Metal Side Panel
33. Plastic Side Panel
34. Plastic Top Panel

Diagram of BioSmart® Heater (1500PB)



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34. Plastic Top Panel

Calibration Procedure for the Thermostat

Your heater comes pre-calibrated from the factory. This means that the internal thermometer measures the actual room temperature against the temperature setting you have selected on the front of the control panel. The heater then determines whether to turn the infrared tubes on or off based upon these two temperature measurements. If the internal thermometer is off, it can be re-calibrated. To determine if it is off, you need to find out what the set-point is coming from the factory. To do this press the "Up" and "Down" buttons at the same time. The control panel will display what the heater thinks the correct temperature in the room is for 10 seconds. This has nothing to do with the temperature you have set your heater to turn on at. If the set-point is within two degrees of what your room thermometer says, we recommend that you leave it where it is. It is close enough and who knows which thermometer is the most accurate. If you wish to change the set-point, however, follow the instructions below:

1500PB Model with "Power-Up-Down" sequence on the control panel. These are pre-calibrated at the factory and cannot be changed.

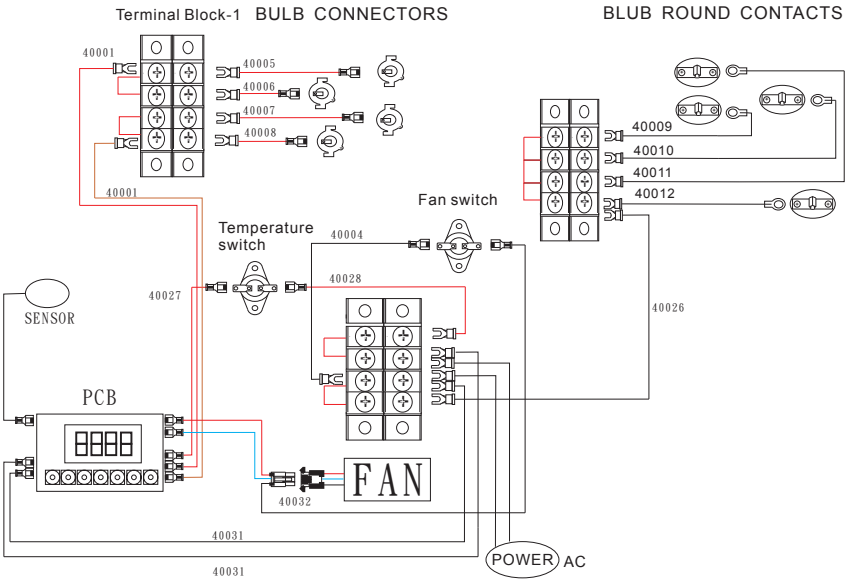
1500PB with "Power-Down-Up" sequence on the control panel. These can be calibrated by using the following procedure: Press POWER & UP simultaneously. The internal thermostat setting will appear on the display. Next, press UP or DOWN until you obtain the desired setting. Finally, press the POWER button to complete the procedure.

1500PC Series: Press ENTER & UP simultaneously. The internal thermostat setting will flash on the display. Next, press ENTER. It will appear as if nothing has happened. Then, press the UP or DOWN button until you obtain the desired setting for the actual room temperature. Now, press the ENTER button again to complete the procedure.

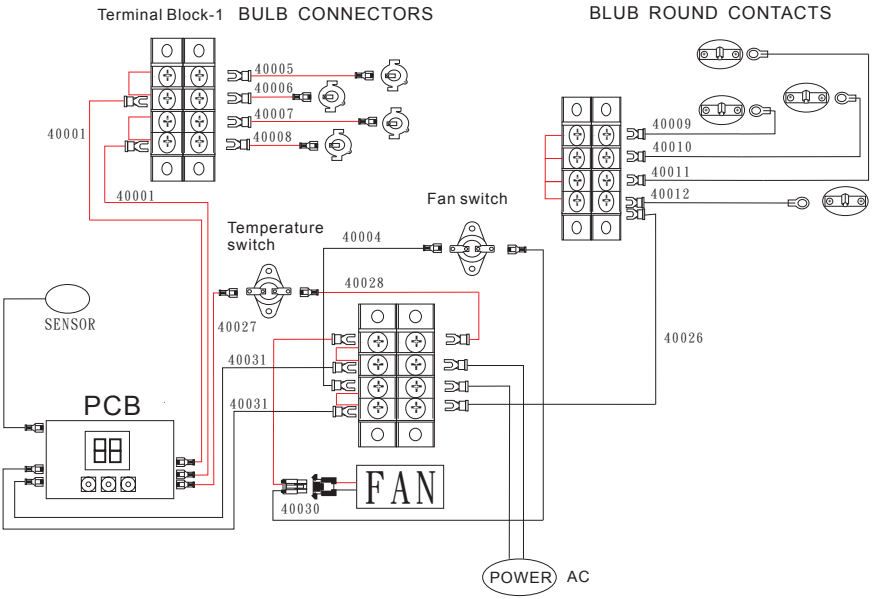
After you have done this, reset your control panel temperature by pressing the temperature button and then pressing the UP or DOWN buttons to your preferred room temperature.

REMEMBER, THIS IS NOT THE TEMPERATURE AT WHICH THE HEATER WILL TURN ON AND OFF. It is the internal thermostat setting only, and it determines if the temperature setting for the heater is accurate to the wall thermometer (if there is one).

Electrical Schematic (1500PCP)



Electrical Schematic (1500PB)



Warranty & Service Information

Three-Year Limited Warranty

BIOSMART TECHNOLOGIES (BT) warrants this product, to the original purchaser or gift recipient, to be free from defects in workmanship and materials under normal use and service, for a period of one year from the date of purchase. BT further warrants the infrared heating elements and fan motors, to the original purchaser or gift recipient, for a period of two additional years from the date of purchase.

Extended Warranty Details: For an additional two-year period, BT shall warrant the infrared elements and fan motors in the heater to be free from defects in workmanship and materials under normal use and service, and shall supply at no cost, excluding shipping, to the original purchaser replacement elements or fans as required to maintain product in good working order.

Shipping: Customer shall bear the cost of return shipping to BT. If BT receives the unit for repair, defective parts, including all labor, will be provided by BT for a period of 1 full year from the date of purchase. If the unit is returned during the first 90 days for repair or replacement, BT may reimburse the return shipping cost to the customer at BT's discretion.

Limitations

ALL WARRANTIES IMPLIED BY LAW, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSLY LIMITED TO THE DURATION OF THE WARRANTY SET FORTH ABOVE.

Some jurisdictions do not allow limitations on the length of the implied warranty, so the above limitation may not apply to you.

Warranty & Service Information (continued)

IN NO EVENT SHALL BT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSS OF PROFIT, OR MEDICAL EXPENSES CAUSED BY ANY DEFECT, FAILURE, MISUSE, OR MALFUNCTION OF THE PRODUCT.

Note: Some jurisdictions do not allow the exclusion of limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. BT will not be responsible for the damages or losses, direct or indirect, caused by misuse, abuse, accident, negligence, conditions of transportation or storage, or failure to follow instructions.

BT will not be responsible for any statements that are made or published, written or oral, that are inconsistent with this written warranty, or which are misleading or inconsistent with the facts as published in the literature or specifications by BT.

Warranty Restriction
This warranty is invalid if the factory-applied serial number has been altered or removed from the product.

Warranty Claim Procedure
To obtain warranty service, you must:

1. Contact BT directly for a Return Merchandise Authorization (RMA) if you purchased directly from BT.
2. Dealer sales: Contact the dealer you purchased your equipment from for additional instruction.
3. Provide proof of purchase, if requested, in the form of a Bill of Sale or receipted invoice to show evidence that the unit is within the warranty period.

Bio Smart® Far Infrared Heaters

Bio Smart® Far Infrared Heaters
Green Technology for a Modern World

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