



**REVSCI**

**REVOLUTIONARY SCIENCE**

Instruction Manual

**ProBath 150**

# Instruction Manual for Revolutionary Science’s **ProBath 150**

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ProBath 150



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## Introduction

Thank you for purchasing the Revolutionary Science ProBath 150. We are confident that, when used correctly, our water bath will provide years of reliable service in your lab or classroom. We have made every effort to use high-quality, durable parts to deliver the performance expected of instruments costing significantly more.

Please let us know what you think of our products, positive or negative, so we can continue to enhance and improve our products in the future.

Sincerely yours,

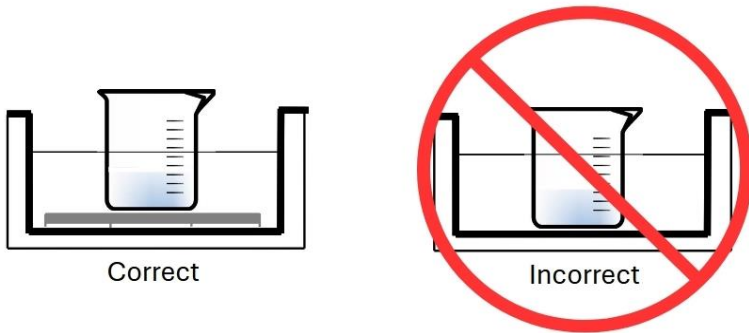
*Revolutionary Science*

## Upon Opening

1. Examine carton and packaging for possible damage caused during shipping. If damage is present, contact the carrier at once.
2. Complete the Checklist section of this manual.
3. Read the instruction manual completely.
4. Visit the product registration webpage by scanning the associated QR code or entering the URL manually and complete the registration online.

## Recommended Safeguards

1. Never attempt to move the ProBath when water in chamber is hot, doing so could cause severe burns. Wait until the water in the chamber is cool to touch.
2. Never attempt to disassemble or modify the product.
3. Never operate the bath when the chamber is dry.
4. Use only distilled or deionized water. Never fill the bath with beads, soil, sand, or other materials.
5. Keep the clear lid in place when operating bath at 60°C and above.
6. Do not operate on soft or wet surfaces.
7. Keep the clear lid in place when operating bath 60°C and above.
8. Make sure the power cord is clear of hot surfaces and other hazards.
9. Do not use near flammables, combustible materials, or explosives.
10. Plug into a grounded electrical outlet outputting the required 120 volts.
11. Like all heating and cooling equipment, the unit's efficiency depends upon the external or ambient conditions. If the room temperature is too low, the bath may not reach high set points of 80 °C or above.



**CAUTION:** Do not place beakers or other flat bottomed devices directly on the bottom of the bath. Place beakers and flasks on metal tray to allow for proper convection.

## Storage Conditions

Do not store your water bath in direct sunlight, or in dusty or poorly ventilated areas. Don't store the water bath in a cold or damp room for extended periods of time.

## Care and Maintenance

Your ProBath should be cleaned periodically to ensure optimal performance and eliminate contamination. Clean the ProBath 150 only when it is unplugged.

Gently scrape any removable residue from the chamber walls. Follow through with a cloth soaked in water and mild detergent; wipe the inside and outside of the unit. Let air dry or wipe with a dry cloth.

# Operating Instructions

## Placement

Place the unit on a stable, hard surface away from counter edges and moving equipment.

## Adding Water to the Bath

Place the metal tray insert into the steel chamber. Add approximately 0.75 gallons (2.8 liters) of distilled water to the chamber and make sure to have at least a 1-inch depth of water during normal operation. If the ProBath 150 is operated without sufficient water a thermal cutoff will activate, temporarily deactivating the heater.

## Connecting to Power

Plug one end of the included power cord into the rear of your water bath and other end into a grounded electrical outlet which outputs 110/120 VAC. The ProBath 150 requires 250 watts of electrical power.

Make certain that the cord is routed safely away from mechanical hazards and hot surfaces. Avoid routing the cord where others may trip or snag on it.

Due to a temperature difference between the recently added water and the bath's set-point, an audible alarm may beep when the ProBath is first powered on. Press the red button to temporarily silence this alarm.

## Toggling Between Celsius and Fahrenheit

To switch between temperature scales, press and hold the red button then press the up-arrow for Celsius or down-arrow button for Fahrenheit.

## Adjusting the Temperature

The value displayed on the screen indicates the water temperature. To increase the water temperature, press and hold the up-arrow button. To decrease the water temperature, press and hold the down-arrow button. These values are adjustable in increments of 0.5°C or 1°F.

If the temperature is  $\pm 1.5^{\circ}\text{C}$  away from set-point, the alarm will sound and the temperature reading will flash. Press the red button to temporarily override this alarm while the water heats or cools.

## Calibrating the Temperature Sensor

Set the temperature of the ProBath 150 to your desired set-point (e.g., 37°C), place the polycarbonate lid on the bath, and wait 1 hour for the bath to reach equilibrium.

Place a thermometer in the bath and record the temperature. If the thermometer and display temperature values differ by more than 0.5°C, then the bath's temperature sensor should be calibrated.

To calibrate the temperature sensor:

1. Press and hold the up-arrow and down-arrow buttons simultaneously until “CAL” is displayed on-screen.
2. Press the up-arrow or down-arrow to increase or decrease the displayed temperature, respectively.
3. Increase or decrease the sensor offset such that the displayed temperature will match the thermometer value. For example, if the thermometer reading was 37°C and the display screen showed 40°C then you would adjust the offset to -3°C ( $37^{\circ}\text{C} - 40^{\circ}\text{C} = -3^{\circ}\text{C}$ ) such that the display will show the correct temperature of 37°C when completed. This offset is adjustable in increments of 0.1°C.
4. Wait three seconds after modifying the offset for the display to return the correct temperature.

## Specifications

Model	RS-PB-150
Net Weight	8 lb (3.63 kg)
Power	110-120 VAC, 50-60 Hz, 250 W, 2.0 A
Chamber Capacity	5.7 L
Digital Display	3-digit, 0.5°C or 1°F increments
Temperature Uniformity (@37°C)	±0.1°C
Temperature Range	Ambient to 90.0°C
Temperature Stability	±0.4°C
External Dimensions [w/o Lid] (L x W x H)	15.75" x 7" x 8"
Chamber Dimensions (L x W x H)	11.875" x 5.875" x 5.875"
Lid Dimensions [External] (L x W x H)	13" x 7" x 5"
Lid Dimensions [Internal] (L x W x H)	10.875" x 5.5" x 5"
Warranty	2-year

## Registration

For your future reference, and to expedite any technical support, please complete the following information:

Date: \_\_\_\_\_

Purchase Date: \_\_\_\_\_

Serial Number: \_\_\_\_\_

Model Number: \_\_\_\_\_

Purchased From: \_\_\_\_\_

## Warranty

The Revolutionary Science ProBath 150 is warranted to be free from defects of material or workmanship under normal use for a period of two years from ship date. If your bath proves to be defective within this warranty period, Revolutionary Science will repair or replace your unit at our option. This warranty will be void if malfunction is caused by accident, misuse, or negligence, including tampering, abuse, or damage in transit. This warranty excludes any relief for incidental or consequential damages. Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you. This warranty gives you specific legal rights; you may also have other rights, which may vary from state to state.

Your bath comes with several built-in safety features. Any attempt to interfere with the operation of these features makes this warranty null and void. To validate this warranty, be sure visit the registration webpage found in the Warranty Registration section below.

## Limitation of Liability

In no event will seller be liable for any consequential, indirect, exemplary, special, or incidental damages, including any lost profits, arising from or relating to the services even if seller has been advised of the possibility of such damages. Seller's total cumulative liability in connection with the services, whether in contract or tort or otherwise, will not exceed the fees paid for the services. One or more claims will not enlarge this limit.

## Contact Us

Revolutionary Science

17319 Lake Blvd.

Shafer, MN 55074 USA

Toll Free: (800) 775-7942

Fax: (775) 218-7015

Email: [sales@revsci.com](mailto:sales@revsci.com)

Web: <https://www.revsci.com>

## Warranty Registration

Please visit the registration webpage by scanning the QR code below or entering it in manually to register your Revolutionary Science ProBath 150 Water Bath.



<https://www.revsci.com/pages/product-registration-and-feedback>

## Checklist

Before discarding packaging materials, please make sure all parts are accounted for:

- ProBath 150
- Bath Lid
- Metal Tray Insert
- Detachable Power Cord



## Troubleshooting

Please visit the Revolutionary Science troubleshooting webpage by scanning the QR code or entering it in manually to view instructional videos which cover potential ProBath 150 issues and their solutions.

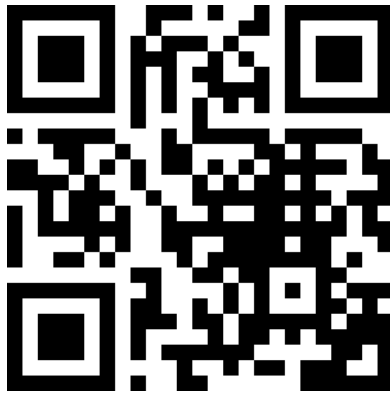


<https://www.revsci.com/pages/troubleshooting>

Symptom	Cause(s)	Action
The displayed temperature is higher or lower than true temperature.	The bath may need to be calibrated.	Follow the instructions found in the “Calibrating the Temperature Sensor” section of this manual.
The display screen is not on.	The red button was pressed and held.	Unplug the unit from the outlet and plug it back in.
	The power cord is disconnected.	Check that the power cord is connected to

		the unit and the power outlet.
The unit does not turn off when the red button is pressed.	The red button was not held down long enough.	Press and hold the red button for ~5 seconds.
The water is not heating.	The bath may need to be calibrated.	Follow the instructions found in the “Calibrating the Temperature Sensor” section of this manual. Contact Revolutionary Science if the problem persists.
	A thermal break may have been triggered to prevent overheating.	Unplug the unit and let it cool for ~10 minutes. Check that the bath chamber has sufficient water ( $\geq 0.75$ gallons), then plug the unit back in. Contact Revolutionary Science if the problem persists.
The unit is taking too long to reach the temperature set-point.	The lid may be off.	Place the lid on the bath. The ProBath 150 is not a rapid head water bath; it may take several hours to reach temperatures greater than 80°C.

*If symptoms persist, please contact Revolutionary Science.*



*Visit us at <https://www.revsci.com>*