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ENGLISH

# Operator's Manual

## THERMAL CIRCULATOR



40868



40861

Item	Description	Voltage	Watts	Amps	Plug
40868	Sous Vide - Immersion Circulator (Head Only)	120V	1100	11 Amps	5-15P
40861	Sous Vide - Immersion Circulator, Head, Bath, and Cover	120V	1100	11 Amps	5-15P

Thank you for purchasing this Vollrath equipment. Before operating the equipment, read and familiarize yourself with the following operating and safety instructions. SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE. Save the original box and packaging. Use this packaging to ship the equipment if repairs are needed.

## SAFETY PRECAUTIONS

To ensure safe operation, read the following statements and understand their meaning. Please read carefully.

### WARNING

Warning is used to indicate the presence of a hazard that *can* cause severe personal injury, death, or substantial property damage if the warning is ignored.

### CAUTION

Caution is used to indicate the presence of a hazard that *will* or *can* cause *minor* personal injury or property damage if the caution is ignored.

### NOTE

Note is used to notify people of installation, operation, or maintenance information that is important but not hazard-related.

### For Your Safety!

These precautions should be followed at all times. Failure to follow these precautions could result in injury to yourself and others.

To reduce risk of injury or damage to the equipment:

- Use only grounded electrical outlets matching the nameplate rated voltage.
- Have equipment installed by a qualified personnel in accordance with local codes and ordinances.
- Use equipment in a flat, level position.
- Do not use an extension cord with this equipment. Do not plug this equipment into a power strip or multi-outlet power cord.
- Unplug equipment and turn off before cleaning or moving.
- Do not spray controls or outside of equipment with liquids or cleaning agents.
- Do not clean the equipment with steel wool.
- Keep equipment and power cord away from open flames, electric burners or excessive heat.
- Do not operate equipment in public areas and/or around children.
- Do not operate if equipment has been damaged or is malfunctioning in any way.

## FUNCTION AND PURPOSE

Vollrath Thermal Circulators are designed provide precise temperature control of water for closed loop circulation. This unit is intended for indoor use at commercial food service establishments. It is not intended for household, industrial or laboratory use.

## UNPACKING THE EQUIPMENT AND INITIAL SETUP

When no longer needed, dispose of all packaging and materials in an environmentally responsible manner.

1. Remove all packing material and tape, as well as any protective plastic from the equipment.

2. Clean any glue residue left over from the plastic or tape.
3. Place the equipment on a flat stable surface.
4. Plug the equipment into a properly grounded electrical supply matching the nameplate rating voltage. Damage to the equipment can occur if incorrect power is supplied to equipment.

### Note:

Using a voltage other than the nameplate rated voltage will cause damage to the unit. Incorrect voltage, modification to the power cord or electrical components can damage unit and will void the warranty.

## FEATURES AND CONTROLS

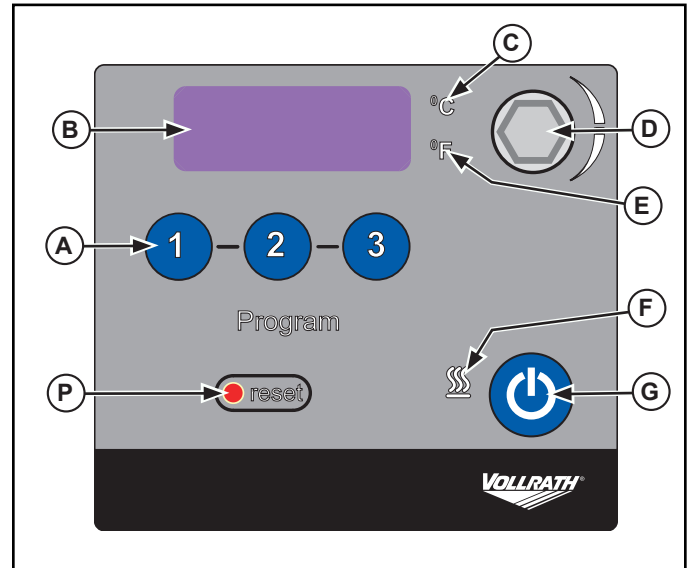


Figure 1. Front of Control Panel.

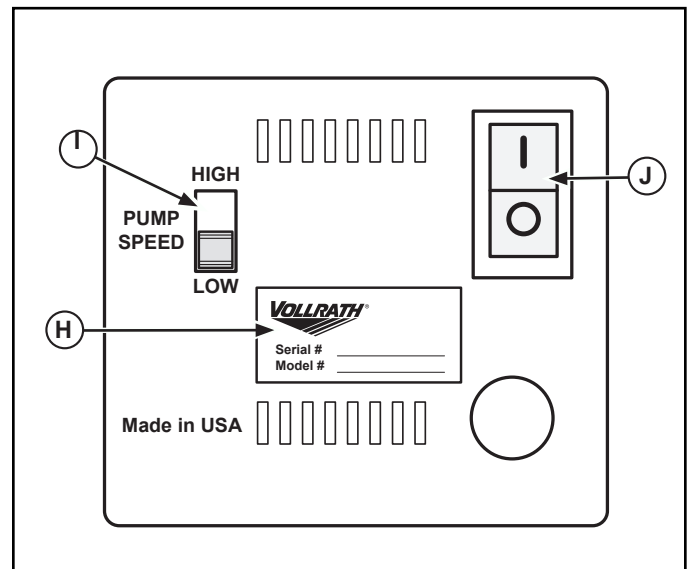


Figure 2. Back of Control Panel.

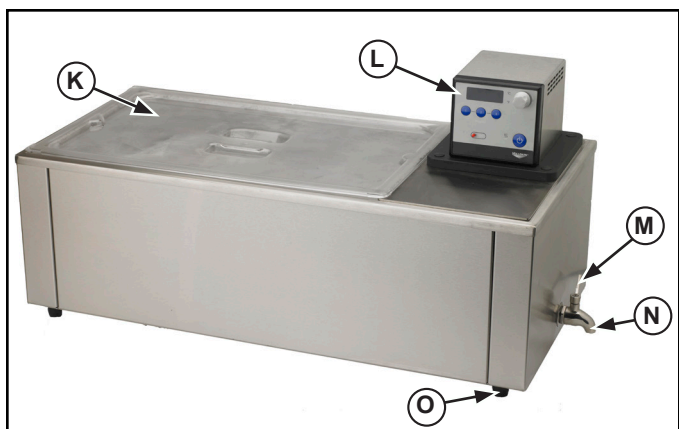


Figure 3. Cover, Drain, and Drain Lever (shown in the "Open" Position).

- (A) **PRESET TEMPERATURE.** Sets the unit to preset temperatures when pressed.
- (B) **DISPLAY.** Displays the temperature being set or in the well.
- (C) **C° TEMPERATURE LIGHT.** When illuminated the display shows temperature in C°.
- (D) **SELECT/SET KNOB (Part Number 23623-1).** Turn to adjust the temperature
- (E) **F° TEMPERATURE LIGHT.** When illuminated the display shows temperature in F°.
- (F) **HEATING LIGHT.** Illuminated when the unit is heating.
- (G) **CONTROLLER ON/OFF BUTTON.** Switches the controller "ON" or "OFF".
- (H) **DATA TAG.** Shows the unit information such as Model and Serial Number.
- (I) **PUMP SPEED SWITCH.** Switches the pump speed between low and high.
- (J) **POWER ON/OFF SWITCH.** Switches the unit "ON" or "OFF".
- (K) **COVER.** Covers the well.
- (L) **CONTROLLER.** Used to program the thermal circulator.
- (M) **DRAIN VALVE LEVER.** Controls the flow of water out of the drain valve.
- (N) **DRAIN VALVE (Part Number 21696-1).** Used to empty water from the well(s).
- (P) **RESET BUTTON.** Used to reset unit if water level drops below element.
- (O) **FOOT (Part Number 23754-1).** Four placed on bottom corners of unit.

## OPERATION



### **WARNING**

#### **Burn Hazard.**

Do not touch hot food, liquid or heating surfaces while equipment is heating or operating.

Hot surfaces and food can burn skin. Allow the hot surfaces to cool before handling.



### **WARNING**

#### **Electrical Shock Hazard.**

Keep water and other liquids from entering the inside of the electrical compartment. Liquid inside the equipment could cause an electrical shock.

Do not spray water or cleaning products. Liquid could contact the electrical components and cause a short circuit or an electrical shock. Do not use equipment if power cord is damaged or has been modified

Before using this equipment clean as described in the **CLEANING** section of this document.

#### **NOTE:**

**Monitor food temperature closely for food safety.** The United States Public Health Service recommends that hot food be heated and held at a minimum of 140 °F (60 °C) to help prevent bacteria growth.

**Heat water only.** Do not use this unit to heat oil, grease or other liquid. Other liquids may become unstable and become hazardous.

**Vacuum packed food creates a low oxygen environment.** With improper handling or preparation bacteria can grow. We recommend that a HCAPP program be put in place. Check with the U.S. Food and Drug Administration for details.

1. For units with baths check that the drain valve lever (M) is in the closed position. See Figure 4. Or, clamp the circulator to a vessel that is 5.3 qt (5L) to 31.7 qt (30L) in volume.

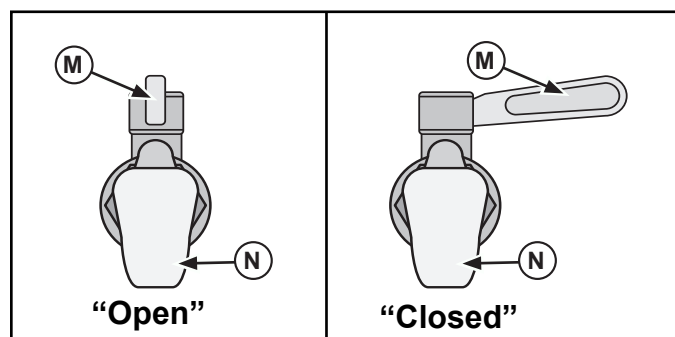


Figure 4. Drain and Drain Lever Positions.

2. Fill the bath or vessel with clean fresh water so that it is about 2" (50 mm) from the top. The water level may need to be adjusted after food product is introduced.
3. Plug electrical power cord into a grounded outlet matching the nameplate rated voltage.
4. Switch the power switch (J) to the "ON" position. See Figure 2.
5. Set the pump speed switch (I) to the desired setting.
6. Press the controller button On/Off button (G). See Figure 1.

### To Change the Display to °F:

1. Switch the power switch (J) to the "OFF" position. See Figure 2.
2. Press and hold the "2" preset temperature (A) while switching the power switch (J) to the "ON" position. See Figures 1 and 2.

### To Change the Display to °C:

1. Switch the power switch (J) to the "OFF" position. See Figure 2.
2. Press and hold the "3" preset temperature (A) while switching the power switch (J) to the "ON" position. See Figures 1 and 2.

### Setting the Set Point Temperature:

1. To set the temperature press and release the select/set knob (D). The decimal point in the display (B) will flash.
2. Rotate the select/set knob (D) to reach desired temperature is displayed. Rotating clockwise increases the setting, rotating counterclockwise decreases the setting. Once the desired setting is reached press the select/set knob (D) a second time. Note: the unit will automatically accept the displayed set point approximately 10 seconds of inactivity, even if the select/set knob was not pressed.
3. Allow the water to preheat completely before adding food product.

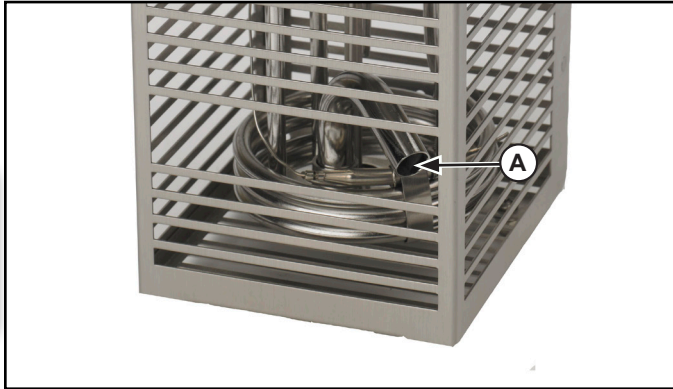


Figure 5. Water Pump Outlet.

4. Monitor water level when adding, removing and heating food product. The water level should be between 1" and 2" (25 mm - 50 mm) from the top of the bath or vessel. Never allow the water level to drop below the water pump outlet (A) during operation. See Figure 5.

### User-Defined Preset Temperature:

1. To set user defined preset temperatures: With the unit "ON" press the

#### NOTE:

**Do not immerse the cord, plug or equipment in water or any other liquid. Do not use a hose to clean this equipment.**

1. Add a few capfuls of white vinegar to the bath or vessel and operate the unit for 20 minutes at 75°F (23°C). If a deeper cleaning is needed mix a solution that is 1/2 white vinegar and 1/2 water and fill and operate the unit for 20 minutes at 75°F (23°C)
2. Allow the equipment to cool completely before emptying the liquid.
3. Empty the liquid and rinse thoroughly.
4. Completely dry the equipment.

desired preset temperature (A) button, 1, 2, or 3. A decimal on the display (B) begins to blink and recalls the previous setting. See Figure 1.

2. Rotate the select/set knob (D) until the desired temperature is displayed. Once the desired setting is reached press the select/set knob (D) a second time. Press the desired preset temperature (A) button to save the temperature to that button.
3. Allow the water to preheat before adding food product.
4. Monitor water level when adding, removing and heating food product. The water level should be between 1" and 2" (25 mm - 50 mm) from the top of the bath or vessel.

### Control Lockout Feature:

This feature enables the user to lock all controls on the controller. While the feature is activated, the unit will remain running at the current settings.

1. Press and hold the select/set knob (D) until display (B) shows "LLo" (about 10 seconds) then let go. See Figure 1. When locked, the setpoint decimal point will not flash.
2. Press and hold the select/set knob (D) again, until the display (B) shows "LLo" (about 10 seconds) then let go, to unlock the controls. Once unlocked, the display (B) will show "CAAn".

### Reset Button:

Should the water level drop below the heater the safety thermostat will activate and disconnect power from the heater and pump. The display (B) will show "FLt 3". Allow to cool and press the reset button (P). See Figure 1.

### When Finished with the Unit:

1. Press the control on/off button (G) and switch the power switch (J) to the "OFF" position. See Figures 1 and 2.
2. Allow the unit and water to cool completely.
3. Place a suitable container directly under the drain valve (N). See Figures 3 and 4. Turn the drain valve lever (M) to the open position monitoring the flow of liquid going into the container. Use caution to avoid spills that may create a slippery condition. Turn drain valve lever (M) to the closed position before the container is full. Dispose of the drained water. This procedure may need to be repeated.

### CLEANING

To maintain the appearance and increase the service life, clean your equipment daily.

ENGLISH

## TROUBLESHOOTING

Problem	It might be caused by	Course of Action
No power to the unit.	Unit not plugged on or switched on.	Plug unit in and turn the power switch to the on position
Unable to set or change the temperature and display reads "LLO".	Local lockout feature has been activated.	See Operator's Manual to deactivate the Control Lockout Feature.
No longer heating and the pump has stopped circulating reads "FLt 3"	Low water	Allow unit to cool and fill the bath or vessel with clean fresh water so that it is about 2" (50 mm) from the top

## SERVICE AND REPAIR

There are no user serviceable parts within this unit. To avoid serious injury or damage, never attempt to repair the equipment or replace a damaged power cord yourself. Do not send equipment directly to the Vollrath Company. Please contact the qualified professional repair service listed below.

**VOLLRATH Technical Service • 1-800-628-0832 • Email: [techservicereps@vollrathco.com](mailto:techservicereps@vollrathco.com)**

When contacting the Authorized Professional Service Center, please be ready with the item number, model number (if applicable), serial number, and proof of purchase showing the date the unit was purchased

## WARRANTY STATEMENT FOR THE VOLLRATH CO. L.L.C.

This warranty does not apply to products purchased for personal, family or household use, and The Vollrath Company LLC does not offer a written warranty to purchasers for such uses.

The Vollrath Company LLC warrants the products it manufactures or distributes against defects in materials and workmanship for a period of one year, except as specifically described in our full warranty statement. In all cases, the warranty runs from the date of the end user's original purchase date found on the receipt.

- Replacement parts – The warranty period is 90 days.

For complete warranty information, product registration and new product announcement, visit [www.vollrath.com](http://www.vollrath.com).



[www.vollrath.com](http://www.vollrath.com)

The Vollrath Company, L.L.C.  
1236 North 18th Street  
Sheboygan, WI 53081-3201  
U.S.A.

Main Tel: 800.628.0830  
Fax: 800.752.5620

Technical Services: 800.628.0832  
Service Fax: 920.459.5462

Canada Service: 800.695.8560

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