# **Operations Manual**

Items: H3770-H, H3770-S, And H3770-HS



## Introduction:

This manual covers the Benchmark Scientific line of digital Hotplates, Stirrers, and Hotplate/Stirrers (Series H3770). In order to ensure the safe operation of the equipment enclosed, please read this manual prior to use.

# **Specifications**

Speed: 150-1500 rpm\*

Temperature: Ambient  $+5^{\circ}\text{C} - 400^{\circ}\text{C}^*$ 

Platform Dimensions: 7" x 7"

Electrical: 115V/60Hz or 230V/60Hz

Power Consumption: Max: 500W Warranty: 2 Years

\*Speed and Temperature control may not be available on all models



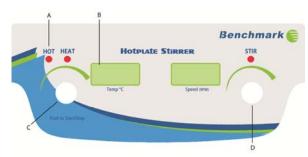
#### Installation:

Place your new Hotplate/Stirrer on a flat, level service with at least 4 inches (10cm) clearance on all sides. If desired, attach the optional support rod to the rear of the unit by screwing threaded end into designated hole. Attach the included power cord to the rear of unit and plug into a grounded outlet of appropriate voltage.



Voltage of outlet must match voltage listed on the label on rear of instrument. Failure to supply appropriate power may damage instrument and void warranty!

## **Control Panel - Hotplate/Stirrer Combination:**



- A) Hot surface indicator light Safety Warning
- B) Digital Display
- C) Temp. selection knob & Start/Stop
- D) Speed control knob & Start/Stop

### **Operation (Hotplate/Stirrer Combination):**

- Turn power switch (rear of instrument) to on position ("I").
- Set stir speed by turning the dial. The set stir speed will appear on the top of the display. To operate without stirring, set stir speed to zero.
- Set temperature by turning the dial. The set temperature will appear on the top of the display.
- Once desired temperature is set, press the selection knob to begin heating. The temperature will begin to rise to the set parameters. HOT surface indicator lights at 50°C and HEAT indicator blinks when heating



**Caution: HOT surface!** Once selection knob has been pressed, the surface of the instrument will begin to heat. Avoid bodily contact or personal injury may occur.

#### **Operation (Hot Plate):**

- Turn power switch (rear of instrument) to on position ("I").
- Set temperature by turning the dial on the left.
- Once desired temperature is set, press selection knob to begin heating. HOT surface indicator lights at 50°C and HEAT indicator blinks when heating.



**Caution: HOT surface!** Once selection knob has been pressed, the surface of the instrument will begin to heat. Avoid bodily contact or personal injury may occur.

# **Operation (Stirrer):**

- Turn power switch (rear of instrument) to on position ("I").
- Set stir speed by turning the dial on the right.
- Once desired stir speed is set the actual stir will rise to the selected stirring speed. To stop operation, press the selection knob.

#### Maintenance:

- To ensure performance and longevity of the instrument, keep outer body and surface plate clean. Disconnect instrument from power source and use a lint free rag to wipe down all surfaces when cool. Do not immerse in water or spray cleaner directly on the instrument.
- The instrument is covered by a 2-year warranty. In the event of failure or defect, disconnect the unit from the power source and contact the manufacturer as soon as possible.

#### **Troubleshooting:**

		Check	Trouble Shooting
	Not heating Or Not stirring	Check power Supply Cord	Plug firmly into socket
		Check Fuse	Replace Fuse

#### Accessories:

H3770-ROD	Optional support rod	
H3770-TP	Optional temperature probe	
H3770-CS	Clamp assembly with support rod and clamps	
	for securing thermometers/probes	
H3770-CSTF	Clamp Set, chemically resistant/inert teflon,	
	includes rod and clamp	

#### **Operation of External Temperature Probes:**

To utilize the external temperature probe, power of the device and connect the probe to the port on the backside of the hotplate/hotplate-stirrer. Power on the instrument. (The device is now displaying the temperature measured by the external temperature probe.) Place the vessel on the top plate and place the probe inside the vessel. Or, attach the support rod and clamp. Then place the external prove inside the clamp so that it is supported and properly submerged in the vessel. NEVER start the heater without first having the vessel on the top plate and the probe submerged.