

# 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 35°C – 400°C* |
| Temperature Increments: | 1°C                   |
| Speed Increments:       | 1 rpm                 |
| Platform Dimensions:    | 7" x 7"               |
| External Dimensions:    | 7 x 11.5 x 4 in.      |
| Weight:                 | 6.4 lbs. (2.9 kg)     |
| Electrical:             | 115V/60Hz or 230V/50H |
| Power Consumption:      | Max: 850W             |
| Warranty:               | 2 Years               |

\*Speed and Temperature control are not available with all models.

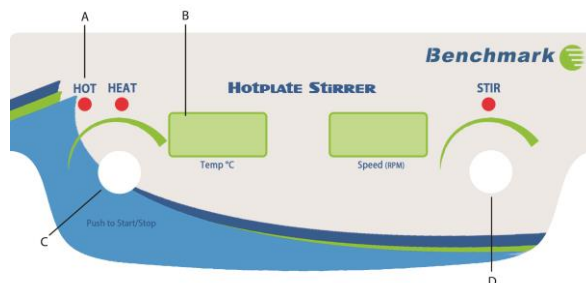
## Installation:

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



**Outlet voltage must match voltage listed on power rating label on the 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) Temperature selection knob – Press to Start/Stop
- D) Speed control knob – Press to Start/Stop

## Operation (Hotplate/Stirrer Combination):

- Turn power switch (rear of instrument) to ON position ("I").
- Set the stir speed by turning the dial ("D"). The set stir speed will appear on the digital display. **To operate without stirring, set stir speed to zero.**
- Set the temperature by turning the dial ("C"). The set temperature will appear on the digital display.
- When the desired temperature appears on the display PRESS the selection knob to begin heating. The temperature will begin to rise to the set parameters. HOT surface indicator light turns on at 50°C. HEAT indicator light blinks while heating.



**Caution: HOT surface!** Once temperature 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 the temperature by turning the dial on the left.
- When the desired temperature appears on the display PRESS the selection knob to begin heating. HOT surface indicator light turns on at 50°C. HEAT indicator light blinks while heating.



**Caution: HOT surface!** Once temperature 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 the stir speed by turning the dial on the right.
- Stir speed will rise until selected stirring speed is achieved. While operating, stir speed can be adjusted by turning the knob. PRESS the selection knob to stop stirring.

## Maintenance:

- To ensure performance and longevity of the instrument please keep the outer body and surface plate clean. To clean the instrument, disconnect 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<br>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, turn power switch to OFF and connect the probe to the port on the backside of the hotplate/hotplate-stirrer. Turn power switch to ON. The device will now display the temperature measured by the external temperature probe. Place the vessel on the top plate and place the probe inside the vessel. A support rod and clamp can also be used with the probe. Place the external probe inside the clamp so that it is supported and submerged properly within the vessel. NEVER start heating without a vessel on the top plate or before submerging the probe.