

Operations Manual

Items: MHS-3, MHS-5, MHS-10



Introduction:

This manual covers the Benchmark Scientific line of digital Multi-position Hotplate/Stirrers (Series MHS). The MHS series feature PID control, overheat protection, and brushless motor.

In order to ensure the safe operation of the equipment enclosed, please read this manual prior to use.

Specifications

Plate Surface:	Ceramic-coated aluminum
Speed:	150-1500 rpm
Temperature:	Ambient +5°C to 120°C
Accuracy:	±1°C
Temp. Increments:	1°C
Speed Increments:	1 rpm
Platform Dimensions:	100 x 100mm / position
IP rating:	4.2
Electrical:	115V, 60Hz or 230V, 50Hz 150W/250W/500W (3/5/10 position respectively)
Warranty:	2 Years

Installation:

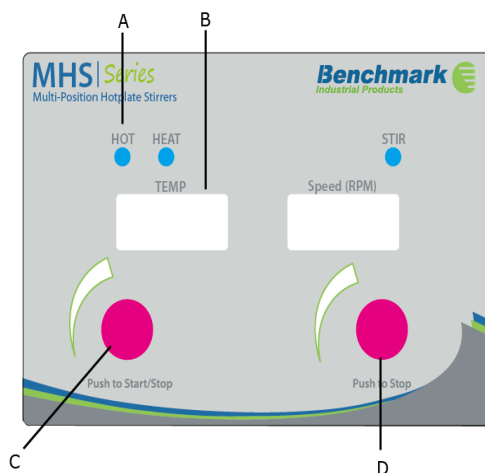
Place your new MHS on a flat, level service with at least 4 inches (10 cm) clearance on all sides. Attach the included power cord to the rear of the unit and plug it into a grounded outlet of appropriate voltage.



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

- For indoor use only
- Do not move the unit before making sure that the power is unplugged and the plate of the machine is completely cool.
- Do not overfill your vessel to prevent the spillage.
- Do not heat any flammable or heat sensitive materials.
- Do not turn on the heating before putting vessel on plate surface.
- Avoid the use of strong detergents or solvents.

Control Panel:



- 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:

- 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 and stirring will begin.
- PRESS the selection knob ("D") while stirring to stop stirring.
- 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 ("C") 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.
- PRESS the selection knob ("C") while heating to stop heating.



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

Maintenance:

- To ensure the performance and longevity of the instrument please keep the outer body and surface plate clean. To clean the instrument, disconnect the 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

Service and Contact:

In the event that service or technical support is required, please contact Benchmark Scientific at +1-908-769-5555.