

# GHS-550HS

# Hotplate Stirrer

## Quick Start Guide

### What's in the box:

- Quick Start Guide
- Hotplate Stirrer
- Stirring Bar
- Power Cable(s)

### INITIAL SETUP

- Unpack the hotplate stirrer and place on a stable, temperature resistant surface.
- Ensure the location of the hotplate stirrer is clean and free of explosive, flammable and hazardous substances.
- Place the hotplate stirrer at least four inches (4") from the wall or any other items.
- Keep the hotplate stirrer away from the effects of high magnetic fields.
- Never cover the hotplate stirrer.
- Ensure that the power cord does not make contact with the hotplate or melting and exposure to dangerous voltages can occur.
- Do not operate the hotplate stirrer with a damaged power cord.
- Connect the power cord to the appropriate voltage power outlet.

### EXTERNAL SENSOR INSTALLATION (OPTIONAL)

- 1) Install the sensor support stand on the rear of the unit.
- 2) Connect the external sensor plug into the appropriate port on rear of the unit.
- 3) Secure the external sensor into the support stand.
- 4) Ensure that the external sensor is at least one inch (1") from the bottom of the vessel.



*GHS-550HS with optional temperature sensor and support stand installed.*

# GHS-550HS Hotplate Stirrer

## Quick Start Guide

### OPERATION

- 1) Use the main power switch located on the left side of the unit to power-up the hotplate stirrer. The unit will perform self-diagnostics.
- 2) Place a vessel with the desired liquid on the surface of the hotplate stirrer and carefully place the stirring bar in the vessel.
- 3) If used, lower the external sensor into the liquid inside the vessel. Ensure that the external sensor is at least one inch (1") from the bottom of the vessel. If no external sensor is used, the unit's internal sensor will be active.
- 4) Temperature and stirring speed can then be set using the two control knobs to the right of the display panel.

**NOTE:** Main Power Switch is located on the left side of the unit. Used to power the hotplate stirrer ON or OFF.

#### LED display

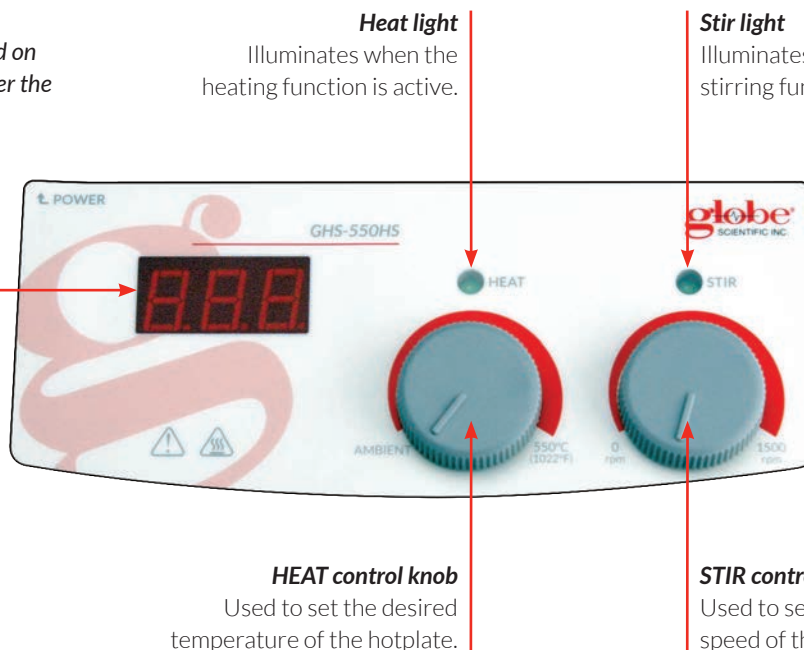
Displays the unit status and all set values. When setting both heating and stirring, the heat (temperature) values will be shown to ensure user safety.

#### Setting temperature function:

- Set the desired temperature by slowly rotating the temperature control knob labeled 'HEAT' to the desired value shown on the display.
- Press the HEAT knob to begin heating.  
**IMPORTANT:** Please use caution when the unit is heating to avoid personal injury.
- The LED display will show the actual temperature value while heating.
- The heat function can be turned off by pressing the HEAT knob again.

#### Setting stirring function:

- Set the desired stirring speed by slowly rotating the speed control knob labeled 'STIR' to the desired setting.
- Press the STIR knob to begin stirring.
- The stirring function can be turned off by pressing the STIR knob again.



# GHS-550HSP

## Hotplate Stirrer

### Quick Start Guide

#### What's in the box:

- Quick Start Guide
- Hotplate Stirrer
- Stirring Bar
- Power Cable(s)

#### INITIAL SETUP

- Unpack the hotplate stirrer and place on a stable, temperature resistant surface.
- Ensure the location of the hotplate stirrer is clean and free of explosive, flammable and hazardous substances.
- Place the hotplate stirrer at least four inches (4") from the wall or any other items.
- Keep the hotplate stirrer away from the effects of high magnetic fields.
- Never cover the hotplate stirrer.
- Ensure that the power cord does not make contact with the hotplate or melting and exposure to dangerous voltages can occur.
- Do not operate the hotplate stirrer with a damaged power cord.
- Connect the power cord to the appropriate voltage power outlet.

#### EXTERNAL SENSOR INSTALLATION (OPTIONAL)

- 1) Install the sensor support stand on the rear of the unit.
- 2) Connect the external sensor plug into the appropriate port on rear of the unit.
- 3) Secure the external sensor into the support stand.
- 4) Ensure that the external sensor is at least one inch (1") from the bottom of the vessel.



*GHS-550HS with optional temperature sensor and support stand installed.*



# GHS-550HSP Hotplate Stirrer

## Quick Start Guide

### OPERATION

- 1) Use the main power switch located on the left side of the unit to power-up the hotplate stirrer. The unit will perform self-diagnostics.
- 2) Place a vessel with the desired liquid on the surface of the hotplate stirrer and carefully place the stirring bar in the vessel.
- 3) If used, lower the external sensor into the liquid inside the vessel. Ensure that the external sensor is at least one inch (1") from the bottom of the vessel. If no external sensor is used, the unit's internal sensor will be active.
- 4) Temperature and stirring speed can then be set using the two control knobs to the right of the display panel.

### Setting temperature function:

- Set the desired temperature by slowly rotating the temperature control knob labeled 'HEAT' to the desired value shown on the display.
- Press the HEAT knob to begin heating.  
**IMPORTANT:** Please use caution when the unit is heating to avoid personal injury.
- The LCD display will show the actual temperature value on the left while heating.
- The heat function can be turned off by pressing the HEAT knob again.

### Setting stirring function:

- Set the desired stirring speed by slowly rotating the speed control knob labeled 'STIR' to the desired setting.
- Press the STIR knob to begin stirring.
- The LCD display will show the actual speed value on the left side while stirring.
- The stirring function can be turned off by pressing the STIR knob again.

**NOTE:** Main Power Switch is located on the left side of the unit. Used to power the hotplate stirrer ON or OFF.

### LCD display

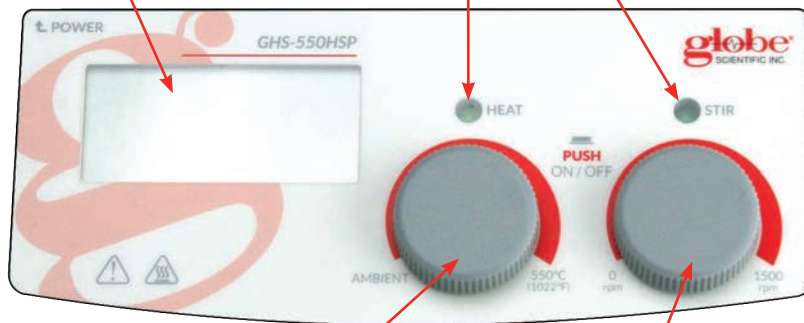
Displays the unit status and all set values. When setting both heating and stirring, the heat (temperature) values will be shown to ensure user safety.

### Heat light

Illuminates when the heating function is active.

### Stir light

Illuminates when the stirring function is active.



### HEAT control knob

Used to set the desired temperature of the hotplate.

### STIR control knob

Used to set the desired stirring speed of the unit.

### Remote operation:

- The hotplate stirrer can be controlled remotely using the RS232 port on the rear of the unit.
- Software is not supplied with the hotplate stirrer.
- The communication protocol is as follows: Full duplex, 1 start bit, 7 character bits, 1 parity bit (even parity), 1 stop bit, 9600 bits/second.
- When using the hotplate stirrer with remote RS232 control, the display panel will illuminate 'Remote' in the lower left corner.



### RS232 Port

Located on the back of the unit.

# GHS-550H

## Hotplate

### Quick Start Guide

#### What's in the box:

- Quick Start Guide
- Hotplate
- Power Cable(s)

#### INITIAL SETUP

- Unpack the hotplate and place on a stable, temperature resistant surface.
- Ensure the location of the hotplate is clean and free of explosive, flammable and hazardous substances.
- Place the hotplate at least four inches (4") from the wall or any other items.
- Keep the hotplate away from the effects of high magnetic fields.
- Never cover the hotplate.
- Ensure that the power cord does not make contact with the hotplate or melting and exposure to dangerous voltages can occur.
- Do not operate the hotplate with a damaged power cord.
- Connect the power cord to the appropriate voltage power outlet.

#### EXTERNAL SENSOR INSTALLATION (OPTIONAL)

- 1) Install the sensor support stand on the rear of the unit.
- 2) Connect the external sensor plug into the appropriate port on rear of the unit.
- 3) Secure the external sensor into the support stand.
- 4) Ensure that the external sensor is at least one inch (1") from the bottom of the vessel.



*GHS-550H with optional temperature sensor and support stand installed.*



# GHS-550H

## Hotplate

### Quick Start Guide

#### OPERATION

- 1) Use the main power switch located on the left side of the unit to power-up the hotplate. The unit will perform self-diagnostics.
- 2) Place a vessel with the desired liquid on the surface of the hotplate and carefully place the stirring bar in the vessel.
- 3) If used, lower the external sensor into the liquid inside the vessel. Ensure that the external sensor is at least one inch (1") from the bottom of the vessel. If no external sensor is used, the unit's internal sensor will be active.
- 4) Temperature can then be set using the control knob to the right of the display panel.

**NOTE:** *Main Power Switch* is located on the left side of the unit. Used to power the hotplate stirrer ON or OFF.

#### Setting temperature function:

- Set the desired temperature by slowly rotating the temperature control knob labeled 'HEAT' to the desired value shown on the display.
- Press the HEAT knob to begin heating.  
**IMPORTANT:** Please use caution when the unit is heating to avoid personal injury.
- The LED display will show the actual temperature value while heating.
- The heat function can be turned off by pressing the HEAT knob again.

#### LED display

Displays the unit status and all set values. While heating, the heat (temperature) value will be shown to ensure user safety.



#### Heat light

Illuminates when the heating function is active.

#### HEAT control knob

Used to set the desired temperature of the hotplate.

# GHS-550S Stirrer

## Quick Start Guide

### What's in the box:

- Quick Start Guide
- Stirrer
- Stirring Bar
- Power Cable(s)

### INITIAL SETUP

- Unpack the stirrer and place on a stable, temperature resistant surface.
- Ensure the location of the stirrer is clean and free of explosive, flammable and hazardous substances.
- Place the stirrer at least four inches (4") from the wall or any other items.
- Keep the stirrer away from the effects of high magnetic fields.
- Do not cover the stirrer.
- Do not operate the stirrer with a damaged power cord.
- Connect the power cord to the appropriate voltage power outlet.

### OPERATION

- 1) Use the main power switch located on the left side of the unit to power-up the stirrer. The unit will perform self-diagnostics.
- 2) Place a vessel with the desired liquid on the surface of the stirrer and carefully place the stirring bar in the vessel.
- 3) Stirring speed can then be set using the control knob on the right of the front panel.

#### Setting stirring function:

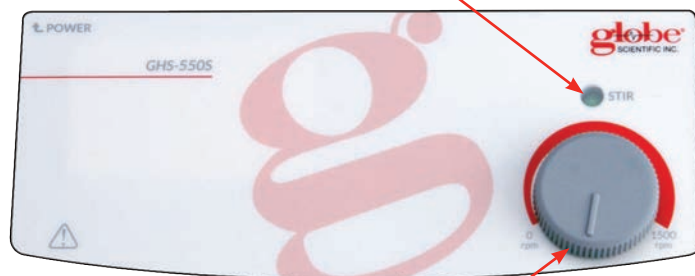
- Set the desired stirring speed by slowly rotating the speed control knob labeled 'STIR' to the desired setting.
- Press the STIR knob to begin stirring.
- The stirring function can be turned off by pressing the STIR knob again.



**NOTE:** Main Power Switch is located on the left side of the unit.

#### Stir light

Illuminates when the stirring function is active.



#### STIR control knob

Used to set the desired stirring speed of the unit.