Electron Microscopy Sciences

INSTRUCTION MANUAL

CAT. 87030-01, 87030-02, 87030-03, 87030-04, 87030-05 87030-06

EMS Digital Hotplate and Magnetic Stirrer





Electron Microscopy Sciences 1560 Industry Road Hatfield, PA 19440 P.O. Box 550

TEL: 215-412-8400 FAX: 215-412-8450 TOLL FREE: 1-800-523-5874 EMAIL: <u>sqkcck@aol.com</u> WEB: <u>www.emsdiasum.com</u>

Introduction

Thank you for purchasing the EMS Digital Hotplate and Magnetic Stirrers! In order to ensure safe operation of the equipment enclosed, please read this manual in its entirety before use.

Specifications

Speed	200-1500 rpm	
Temperature	Ambient +5°C – 380°C	
Platform dimensions	6.5" x 6.5"	
Electrical	115V/60Hz or 230V/60Hz	
Power consumption	Max: 500W	
Warranty	2 years	

Installation

Prior to installation, please ensure all components are included within the carton and have arrived as expected. Should any parts or pieces be missing, please contact Electron Microscopy Sciences immediately.

Place the hotplate/stirrer on a flat, level surface with at least 4 inches of 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 proper power cord to the rear of the unit and plug into a grounded outlet of appropriate voltage.



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

Control panel - Hotplate/Stirrer combination



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

Operation - Hotplate/Stirrer combination

- 1. Turn power switch (rear of instrument) to the ON position ("I").
- 2. 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.
- 3. Set temperature by using the up and down keys beneath the display. The set temperature will appear on the bottom of the display. To operating without heating, set temperature to zero.
- 4. Once desired stir speed and temperature are set, press the selection knob to begin stirring and heating. The actual stir speed and temperature will begin to rise to the set parameters. Hot surface indicator lights at 50°C.



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.

Control panel - Hotplate and stirrer



- A) Hot surface indicator (Hotplate only)
- B) Digital Display
- C) Temp. control dial (Speed control in stirrer model)
- D) Start/Stop

Operation - Hot plate

- Turn power switch (rear of instrument) to the ON position ("I").
- Set temperature by turning the dial on the right.
- The set temperature will appear on bottom of display, with actual surface temperature appearing on top of display.
- 4. Once desired temperature is set, press selection knob to begin heating. The actual temperature (top of display) will rise to match the temperature set on the bottom. Hot surface indicator lights at 50°C.



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

- 1. Turn power switch (rear of instrument) to ON position ("I").
- 2. Set stir speed by turning the dial on the right.
- 3. The set stir speed will appear on the bottom of the display, with the actual stir speed appearing on the top of the display.
- 4. Once the desired stir speed is set, press selection knob to begin stirring. The actual stir speed (top of display) will rise to the selected stirring speed.

Maintenance

- To ensure performance and longevity of the instrument, keep outer body and surface plate clean.
 Disconnect the instrument from power source and use a lint-free rag to wipe down all surfaces when cool. Do no 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	Troubleshooting
Not heating or not stirring	Power supply cord	Plug firmly into socket
	Fuse	Replace fuse