



## **Heated Magnetic Stirrer**

#150-83 - 115 Volt #150-84 - 230 Volt

## **Instruction Manual**

Updated 3/26/2025 Ver. 2

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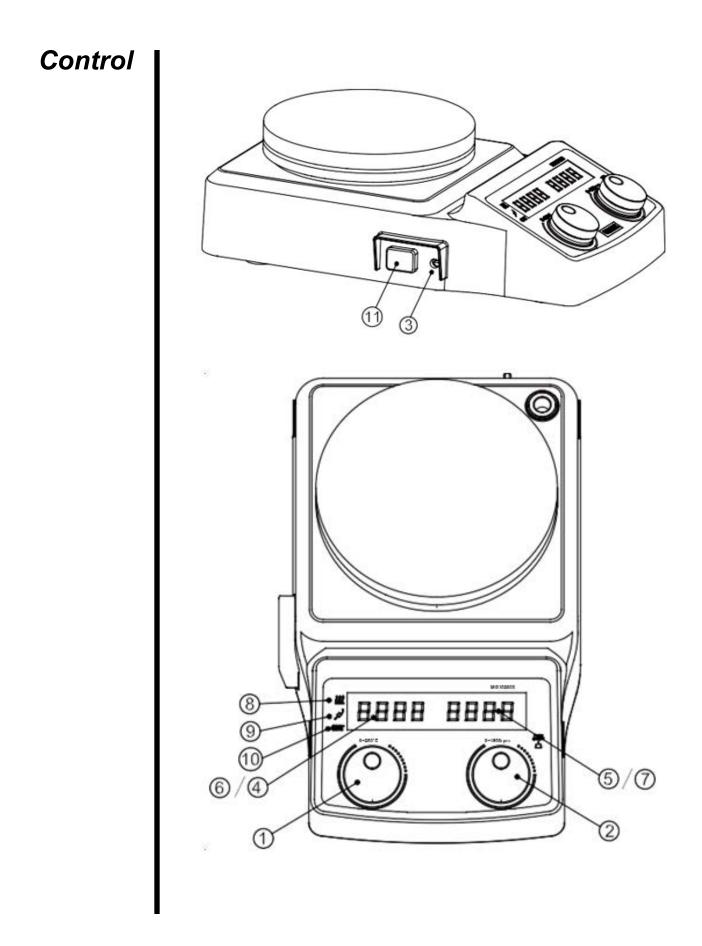
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#### Read these instructions before using this equipment.

- The heating plate can reach temperatures of 280°C (536°F). Be aware of residual heat after turning off the device.
- Wear personal protective equipment at all times.
- Only use the device on a sable, clean surface.
- Increase speed gradually to prevent splashing.
- Make sure the input voltage matches the voltage marked on the device.
- Thoroughly clean the heating plate after every use.

### **Specifications**

- Maximum Temperature: 280°C (536°F)
- Speed Range: 100 1,500 rpm
- Included Stir Bar: Teflon, 1.5" Long × ¼" Wide (38 × 6.4 mm)
- Display: LED, Temperature and Speed
- Display Accuracy: ±0.1°C
- Working Plate Material: Stainless Steel with Ceramic Coating
- Working Plate Size: 5.3" (135 mm)
- Heating Power: 600 Watts
- Voltage: #150-83: 115 VAC / #150-84: 230 VAC
- Fequency: 50/60 Hz
- Dimensions: 10.5" × 6.3" × 3.4" (268 × 160 × 86 mm)
- Weight: 4 lb (1.8 kg)



| 1Temperature KnobSet the temperature by rotating the<br>knob. Press the knob to start or stop<br>heating.2Speed KnobSet the speed by rotating the knob.<br>Press the knob to start or stop stirring.3Safety Temperature KnobSet the safety temperature by rotat-<br>ing the knob. When the temperature is<br>higher than the safety temperature, the<br>machine stops heating.4Temperature DisplayShows the current temperature and<br>the temperature setpoint. Shows "OFF"<br>when heating is turned off.5Speed DisplayShows the current speed and the<br>speed setpoint. Shows "OFF" when<br>stirring is turned off.6, 7Safety Temperature DisplayWhen setting the safety temperature,<br>the first 4 digits display "SAFE" and the<br>last 4 digits display the temperature<br>value.8Heating IndicatorLit when heating.9External Temperature Sen-<br>sor IndicatorWhen the external temperature of the<br>external temperature sensor. When it's<br>disconnected, the indicator is lit and the<br>LED displays the temperature of the<br>external temperature sensor is dis-<br>played.10Setting IndicatorThe light will flash when setting the<br>temperature or speed.11Power switchSwitch on/off  |      |                            |  |
|---|------|----------------------------|--|
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| 11 Power switch Switch on/off   | 10   | Setting Indicator          |  |
|   | 11   | Power switch               | Switch on/off  |

#### Operation

- 1. Plug the Stirring Hot Plate into an appropriate power source.
- 2. Turn the power switch on.
- 3. Place a container with fluid onto the heating plate.
- 4. Place the stir bar into the fluid.
- 5. Turn the Temperature Knob to set the temperature.
- 6. Press the Temperature Knob to start heating.
- 7. Press the Speed Knob to start stirring.
- 8. Slowly turn the Speed Knob to set the stir speed.

Always increase the speed gradually to avoid splashing.

- 9. When the test is complete, press the Speed Knob to stop stirring.
- 10. Press the Temperature Knob to stop heating.
- 11. Allow the sample to cool before removing it from the heating plate.

To prevent the risk of burns, this instrument has a residual heat warning. When heating is turned off and the heating plate temperature is still above  $120^{\circ}F$  ( $50^{\circ}C$ ), "Hot" will flash on the display. When the heating plate temperature drops to below  $120^{\circ}F$  ( $50^{\circ}C$ ), the instrument will automatically power off.





### **Error Codes**

| Error Code | Error Description                                | Solutions  |
|------------|--|--|
| Er1        | Short circuit in the external temperature sensor | Replace external temperature sensor and restart the device |
| Er2        | Open circuit in the internal temperature sensor  | Restart the device   |
| Er3        | Short circuit in the internal temperature sensor | Restart the device   |
| Er4        | Excessive temperature of the device              | Power off. Restart the device after cooling down.          |
| Er5        | Motor failure                                    | Reduce the sample  |

#### Maintenance

Proper maintenance can keep the device in good working order and extend its life.

- Clean the Stirring Hot Plate with soapy water or isopropyl alcohol only.
- Do not allow moisture to get into the device.
- Disconnect the power plug for cleaning or maintenance.

## Standards and Regulations

This device was built in accordance with the following safety standards:

- EN 61010-1
- UL 3101-1
- CAN/CSA C22.2(1010-1)
- EN 61010-2-10

This device was built in accordance with the following EMC standards:

• EN 61326-1

Associated EU guidelines:

- EMC-guidelines: 89/336/EWG
- Instrument guidelines: 73/023/EWG

# Warranty and Return Policy

#### Warranty:

OFI Testing Equipment, Inc. (OFITE) warrants that the products shall be free from liens and defects in title, and shall conform in all respects to the terms of the sales order and the specifications applicable to the products. All products shall be furnished subject to OFITE's standard manufacturing variations and practices. Unless the warranty period is otherwise extended in writing, the following warranty shall apply: if, at any time prior to twelve (12) months from the date of invoice, the products, or any part thereof, do not conform to these warranties or to the specifications applicable thereto, and OFITE is so notified in writing upon discovery, OFITE shall promptly repair or replace the defective products. Notwithstanding the foregoing, OFITE's warranty obligations shall not extend to any use by the buyer of the products in conditions more severe than OFITE's recommendations, nor to any defects which were visually observable by the buyer but which are not promptly brought to OFITE's attention.

In the event that the buyer has purchased installation and commissioning services on applicable products, the above warranty shall extend for an additional period of twelve (12) months from the date of the original warranty expiration for such products.

In the event that OFITE is requested to provide customized research and development for the buyer, OFITE shall use its best efforts but makes no guarantees to the buyer that any products will be provided.

OFITE makes no other warranties or guarantees to the buyer, either express or implied, and the warranties provided in this clause shall be exclusive of any other warranties including ANY IMPLIED OR STATUTORY WARRANTIES OF FITNESS FOR PURPOSE, MERCHANTABILITY, AND OTHER STATUTORY REM-EDIES WHICH ARE WAIVED.

This limited warranty does not cover any losses or damages that occur as a result of:

- · Improper installation or maintenance of the products
- Misuse
- Neglect
- · Adjustment by non-authorized sources
- Improper environment
- Excessive or inadequate heating or air conditioning or electrical power failures, surges, or other irregularities
- Equipment, products, or material not manufactured by OFITE
- · Firmware or hardware that have been modified or altered by a third party
- Consumable parts (bearings, accessories, etc.)

#### **Returns and Repairs:**

Items being returned must be carefully packaged to prevent damage in shipment and insured against possible damage or loss. OFITE will not be responsible for equipment damaged due to insufficient packaging.

Any non-defective items returned to OFITE within ninety (90) days of invoice are subject to a 15% restocking fee. Items returned must be received by OFITE in original condition for it to be accepted. Reagents and special order items will not be accepted for return or refund.

OFITE employs experienced personnel to service and repair equipment manufactured by us, as well as other companies. To help expedite the repair process, please include a repair form with all equipment sent to OFITE for repair. Be sure to include your name, company name, phone number, email address, detailed description of work to be done, purchase order number, and a shipping address for returning the equipment. All repairs performed as "repair as needed" are subject to the ninety (90) day limited warranty. All "Certified Repairs" are subject to the twelve (12) month limited warranty.

Returns and potential warranty repairs require a Return Material Authorization (RMA) number. An RMA form is available from your sales or service representative.

Please ship all equipment (with the RMA number for returns or warranty repairs) to the following address:

OFI Testing Equipment, Inc. Attn: Repair Department 11302 Steeplecrest Dr. Houston, TX 77065 USA

OFITE also offers competitive service contracts for repairing and/or maintaining your lab equipment, including equipment from other manufacturers. For more information about our technical support and repair services, please contact techservice@ofite.com.