OPERATING MANUAL

MAGNETIC STIRRER

Model Nos.
700-4805
700-4865
EU Declaration of Conformity

Name of Apparatus: Magnetic Stirrer
Model Number: 700-4865
Description of Apparatus: Variable Speed Magnetic Stirrer

Barnant Company declares that the above model is in conformity to the following harmonized standards and directives:

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<th>Manufacturer’s Report Number</th>
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<tr>
<td>93/68/EEC</td>
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</table>

Manufacturer: Barnant Company Division
Cole-Parmer Instrument Company
28W092 Commercial Avenue
Barrington, IL 60010-2392
USA
Tel.: 847-381-7050

Manufacturer’s Signature:

James W. Doll
Vice President, Engineering

23 August, 2000
Date
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SAFETY PRECAUTIONS

WARNING: To prevent injury from corrosive and caustic substances being stirred, do not attempt to retrieve the magnetic stir bar from the liquid using your fingers. USE A STIR BAR RETRIEVER.

WARNING: PRODUCT USE LIMITATION
This product is not designed for, nor intended for use in patient connected applications; including, but not limited to, medical and dental use, and accordingly has not been submitted for FDA approval.
INTRODUCTION AND GENERAL DESCRIPTION

Thank you for selecting the Magnetic Stirrer.

Model 700-4805 is intended for use with a 115V AC 60 Hz power source.

Model 700-4865 is intended for use with a 230V AC 50 Hz power source.

This very small, rugged magnetic stirrer can stir liquid volumes of up to 2.5 L. The stirring speed can be adjusted from 140 to 1200 rpm. The stirrer can be rack-mounted using the supplied mounting bar to conserve valuable bench-top space.

The stirrer features a non-skid, chemically resistant surface to prevent slippage of the container being agitated and is supplied complete with a seamless TEFLON® PTFE-encased SLIM-LINE® magnetic stir bar.

Note: The magnetic stir bar supplied with this unit is the largest stir bar recommended for use with this stirrer. Use of larger stir bars may give unsatisfactory performance and are not recommended.

UNPACKING

Inside the carton, you should find a magnetic stirrer, magnetic stir bar, rack-mounting bar and a power supply.

RACK MOUNTING

The unit may be prepared for rack mounting by unscrewing in a counterclockwise direction the cap located on the rear of the unit. Screw in the rack-mounting rod as shown in the figure below.
OPERATION

1. Place the container to be stirred on the non-skid surface of the stirrer. Place the stir bar in the liquid to be stirred.

2. Turn the stirrer speed control knob fully counterclockwise. Turn the power switch to the ON position. The visual power indicator located on the left side of the front panel will illuminate. The stirring action should begin immediately. If it does not or the fluid is viscous, it may be necessary to increase the stirring action by adjusting the speed control knob clockwise slightly until stirring just begins.

3. Adjust stirring speed control to the desired speed, clockwise to increase, counterclockwise to decrease. Note: Once stirring has started, you cannot stop the stirring motion using the speed control knob. To stop all stirring motion, the power switch must be placed in the OFF position.

WARNING: To prevent injury from corrosive and caustic substances being stirred, do not attempt to retrieve the magnetic stir bar from the liquid using your fingers. USE A STIR BAR RETRIEVER.

MAINTENANCE

The unit requires no periodic maintenance other than cleaning of the external surfaces to remove chemical spills or residues.

Cleaning

Keep the stirrer enclosure clean with mild detergents. Never immerse nor use excessive fluid.

Accessories

- Stir Bar Retriever 13 in L 08555-20
- Stir Bar Retriever 18 in L 08555-40
- Stir Bar, 1 in L x 3/8 in D 04770-40

Note: The Magnetic Stirrer can be used with all SLIM-LINE Stir Bars no longer than 1 in (2.5 cm) in length.

Service Parts

<table>
<thead>
<tr>
<th>Item</th>
<th>Part Number</th>
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<tr>
<td>Skid Pad</td>
<td>A-4621</td>
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<tr>
<td>Wall-Mount Power Supply 115V AC UL listed</td>
<td>77120-01</td>
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<td>Wall-Mount Power Supply 230V AC CE approved</td>
<td>77120-06</td>
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## SPECIFICATIONS

### Output:
- **Stirring Speed Range:** 140 to 1200 rpm
- **Direction of Rotation:** Clockwise
- **Speed Regulation:** ±10%
- **Maximum Stirring Volume:** 2.5 L

### Input:
- **Supply Voltage/Frequency:**
  - Model No. 700-4805: 115V AC nominal 60 Hz (90–130V AC) @ 70 mA AC
  - Model No. 700-4865: 230V AC nominal 50 Hz (190–260V AC) @ 35 mA AC
- **Installation Category:** Installation Category II per IEC 664 (Local level—appliances, portable equipment, etc.)

### Construction:
- **Dimensions (L x W x H):** 2.75 in x 2.75 in x 3.75 in
- **Weight:** 1 lb (0.4 kg)
- **Enclosure Rating:** IP54 per IEC 529

### Environment:
- **Operating Temperature:** 0° to 40°C
- **Storage Temperature:** –40° to 65°C
- **Humidity (non-condensing):** 10 to 90%
- **Altitude:** Less than 6600 ft (2000m)
- **Pollution Degree:** Pollution Degree 2 per IEC 664 (Indoor usage—lab, office)
- **Chemical Resistance:** Exposed materials are painted aluminum, neoprene and polyester

### Compliance:
- **Model No. 700-4805**
  - 115V AC Power Supply AC/DC Converter is UL listed and CSA approved. Regulatory agency specifications not applicable to the balance of the unit due to low voltage.
- **Model No. 700-4865**
WARRANTY

The Manufacturer warrants this product to be free from significant deviations from published specifications. If repair or adjustment is necessary within the warranty period, the problem will be corrected at no charge if it is not due to misuse or abuse on your part as determined by the Manufacturer. Repair costs outside the warranty period, or those resulting from product misuse or abuse, may be invoiced to you.

*The warranty period for this product is noted on the Warranty Card.*

PRODUCT RETURN

To limit charges and delays, contact the seller or Manufacturer for authorization and shipping instructions before returning the product, either within or outside of the warranty period. When returning the product, please state the reason for the return. For your protection, pack the product carefully and insure it against possible damage or loss. Any damages resulting from improper packaging are your responsibility.

TECHNICAL ASSISTANCE

If you have any questions about the use of this product, contact the Manufacturer or authorized seller.