



# ***FLASK DANCER***

270200

## *Operating Instructions*



# Contents

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# 1. Safety

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The following symbols mean:-



Caution: Read these operating instructions fully before use and pay particular attention to sections containing this symbol

Always observe the following safety precautions

-  Use only as specified by the operating instructions, or the intrinsic protection may be impaired.
-  After transport or storage in humid conditions, dry out the unit before connecting it to the supply voltage. During drying out the intrinsic protection may be impaired.
-  Connect only to a power supply with a voltage corresponding to that on the serial number label.
-  Ensure that the main switch and isolating device (power supply connector) are easily accessible during use.
-  Connect only to a power supply which provides a safety earth (ground) terminal.
-  Before moving, disconnect at the power supply socket.
-  If liquid is spilled inside the unit, disconnect it from the power supply and have it checked by a competent person.
-  It is the user's responsibility to carry out appropriate decontamination if hazardous material is spilt on or inside the equipment.
-  Do not place a load exceeding 2.5 kg (5.5 lb) on **Flask Dancer**.
-  Place unit on a solid, level work surface or laboratory bench.
-  Clean the unit only with a damp cloth, do not use chemical cleaning agents.
-  Before using any cleaning or decontamination method except those recommended by the manufacturer, user should check with the manufacturer that the proposed method will not damage the equipment.

## 2. General Information

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The Boekel Scientific **Flask Dancer** operation is based on the rotational movement of the platform with a constant amplitude for effective mixing of biological fluids or chemicals in different vessels. Operation is controlled using the microprocessor; control function is situated on the front panel of the unit.

The Boekel Scientific **Flask Dancer** is designed for liquids, chemical and biological solutions mixing and cultivation. It is intended for use in laboratory operations, and can be used in ambient temperatures that range from +4° to +45°C.

# 3. Getting Started

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## 3.1 Unpacking

Remove packing materials carefully, and retain for future shipment or storage of the unit.

## 3.2 The **Flask Dancer** includes:

- Flatbed rotator (no platform) ..... 1 piece
- AD/DC adapter ..... 1 piece
- Operating Instructions ..... 1 copy
- Plug Adapter Kit for UK-Europe-Australia ..... 1 kit

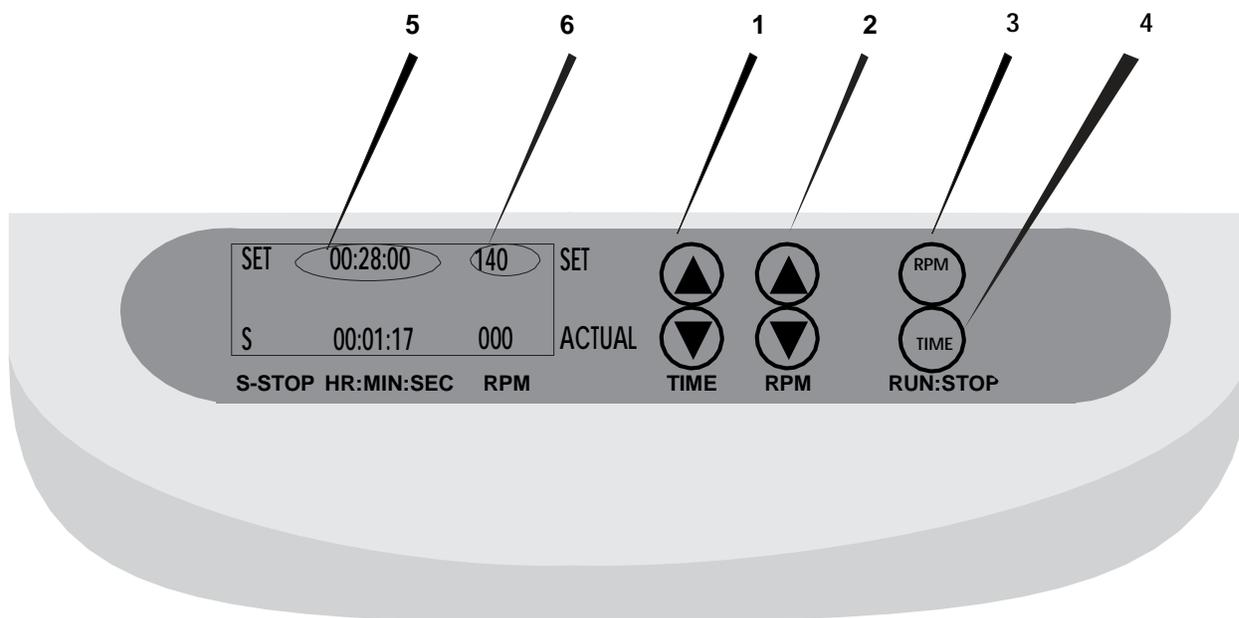
Note: At least one platform is required for operation, see 3.3

## 3.3 Optional platforms available for purchase:

- 270293 Flat platform with non-slip rubber mat
- 270292 Universal platform with adjustable bars
- 270291 Platform with clamps for 12 x 100ml flasks/150ml beakers
- 270290 Platform with clamps for 6 x 250ml flasks/400ml beakers

## 4. Operation

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- 4.1 Connect the **FLASK DANCER** to the AC/DC adapter.
- 4.2 Connect the adapter to the main power supply.
- 4.3 Place the flasks or plate on the platform and secure in place.
- 4.4 Using the buttons ▲ and ▼ (1) set the required operation time using the LCD display (5). Note: This is optional. The unit will operate open-ended if a required operation time is not needed.
- 4.5 Using the buttons ▲ and ▼ (2) set the required rotation speed using the LCD display (6).
- 4.6 Press the **RUN/STOP RPM** button (3). The platform will start to rotate and the timer indicator will start counting the elapsed time until the set time interval is reached, if a set time was used.
- 4.7 If a set time was programmed and the set time interval is reached, the platform will stop and the display will show the blinking indications {STOP}. The unit will emit a beeping signal to signal the end of the operation.

Press **RUN/STOP RPM** button to cancel the sound signal.

## 4. Operation (cont'd)

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- 4.8 If required, there is an opportunity during the operation to reset the time by pressing the **RUN/STOP TIME** button (4) twice (first time to stop the timer, second time to start it from zero).
- 4.9 At any time the operation can be stopped by pressing the **RUN/STOP-RPM** button (3).
- 4.10 To reset the program from the beginning, depress the RUN/STOP-RPM key for 3-4 seconds. Secondly, depress the RUN/STOP-TIME key for 3-4 seconds. At this point, your program is set back to zero and can be re-programmed.

# 5. Specifications

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## 5.1 The Boekel *Flask Dancer* provides:

- Gentle or vigorous orbital rotational mixing; depending on speed chosen.
- Smooth regulation, stabilization and indication of speed (tachometer);
- Equal amplitude across the platform;
- Setting of a necessary time interval and its indication (timer);
- Automatic termination of operation after the set time interval has elapsed;
- Indication of current and set rotation speed, on LCD display panel.
- Indication of the operation time of the unit, on LCD display panel

## 5.2 Technical specification

- Revolution regulation range .....50 - 300 rpm
- Speed adjustment step .....10 rpm
- Amplitude of rotational shift .....10 mm
- Maximal load .....5.5 lb.
- Ambient operating temperature range .....+4°C to +45°C
- Operation adjustment time.....5 seconds
- Timer range .....1 minute to 96 hours
- Time adjustment step .....1 minute
- Size of platforms:
  - 270293 (for plates) .....220 x 220 mm
  - 270292 (universal) .....270 x 200 mm
  - 270291 (12 places for 100 ml flasks) .....250 x 190 mm
  - 270290 (6 places for 250 ml flasks) .....250 x 190 mm
- Power .....12 VDC, 500 mA
- Dimensions .....10.8 in. x 10.2 in. x 3.3 in.
- Weight .....9.9 lb.

# 6. Warranty and Service

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## 6.1 Warranty

When used in laboratory conditions and according to these operating instructions Boekel warrants this product to be free of defective parts, material or workmanship for a period of two years from the date of shipment. The liability of Boekel Scientific for any defective equipment during the warranty period shall be limited to the repair of defective equipment or replacement thereof without charge for parts or labor.

## 6.2 Service

A Boekel Scientific Returned Material Authorization (RMA) number provided by Boekel Scientific is required before any Boekel products are returned for any reason. Please contact Customer Service at 1-800-336-6929 Extension 5. A Decontamination Certificate must be completed, signed by the user, and returned to Boekel Scientific prior to receiving the RMA number. Please be sure to mark the outside of the returned goods package with this RMA number to ensure prompt handling.

Boekel Scientific  
855 Pennsylvania Blvd.  
Feasterville, PA 19053  
PHONE: (215) 396-8200 or (800) 336-6929  
FAX: (215) 396-8264  
E-mail: [boekel-info@boekelsci.com](mailto:boekel-info@boekelsci.com)