



Mini-Tube Rotator

Model 260750

Operating Instructions

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1. Safety

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.
-  As the unit is producing shaking or rotational movement, be aware of the surface that the unit will be placed upon. Always place unit on a solid, level work surface or laboratory bench.
-  Connect only to a power supply with a voltage corresponding to that on the external AC adapter label.
-  Ensure that the main switch and isolating device (power supply connector) are easily accessible during use.
-  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.
-  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.
-  Clean the unit only with a damp cloth, do not use chemical cleaning agents.
-  Always ensure proper balancing of tubes in Carousel prior to operation.

2. General Information

The Boekel Scientific Mini-Tube Rotator is designed for rotating various sized laboratory tubes at a variety of mixing angles at speeds ranging from 4 to 18 rpms. The fully adjustable carousel plates offer variable mixing options ranging from a very vigorous end over end mixing action to a very gentle rolling action.

This device can be used in:

- Life Science Laboratories
- Blood Banks
- Liquid – Liquid Extractions
- Dissolving Samples
- Room Temperature Blots

3. Getting Started

3.1 Unpacking

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

3.2 The Boekel Scientific Mini-Tube Rotator unit includes:

- Tube Rotator...1 piece
- External AC Adapter.....1 piece
- Tube Carousel (260751).....1 piece
- Operating Instructions.....1 copy

4. Operation

Control Panel



- 4.1 Connect the Mini-Tube Rotator to the AC/DC adapter and the adapter to the main power supply and the power cord to power supply outlet.
- 4.1.1 Load the Carousel into the Mini-Tube Rotator by aligning the axis of the carousel with the support hole on the back bracket of the unit and the drive channel located on the back of the front housing. The frame of the Mini-Tube Rotator will flex to allow easy installation or removal of or various carousel options.
- 4.2 Turn on the power by depressing the Power Button on the front of the control panel.
- 4.3 **Adjusting the Speed of the Rotator**
- 4.3.1 If you wish to increase the speed of the unit, press the arrow up key ▲ to toggle to the desired set speed.
- 4.3.3 If you wish to decrease the speed of the unit, press the arrow down key ▼ to toggle to the desired set speed.
- 4.4 Once the desired speed has been set, depress the Start/Stop button to start and stop the rotator. The Start/Stop button can be pushed at any time to stop the rotator.
- 4.6 The Boekel Scientific Mini-Tube Rotator will retain the last set Speed value upon power off and power on.
- 4.7 **Changing the Angle of the Carousel**
- 4.7.1 To change the Carousel tilt angle, stop the function of the rotator by depressing the Start/Stop button on the control panel.
- 4.7.2 Turn off the mini-tube rotator using the power button on the instrument control panel and remove all sample tubes from the carousel.

- 4.7.3 Remove the Carousel Plate from the rotator and adjust the angle as desired.
- 4.7.4 Re-install the Carousel plate onto the mini-tube rotator and install sample tubes into carousel making sure that the tubes are balanced in the carousel.
- 4.7.5 Turn the rotator on by depressing the power button on the control panel.
- 4.8 **Changing Carousel plate**
- 4.8.1 Turn off the mini-tube rotator by depressing the power button on the instrument control panel
- 4.8.2 Gently Remove the Carousel and select the desired Carousel to be used on the Mini-Tube Rotator housing.
- 4.8.3 Re-install the Carousel plate onto the mini-tube rotator and install sample tubes into carousel making sure that the tubes are balanced in the carousel.
- 4.8.4 Turn on the power by depressing the Power Button on the front of the control panel.

5. Specifications

- **The Boekel Scientific Mini-Tube Rotator provides:**

- Digital Microprocessor Control.
- Cold Room and incubator compatibility.
- Adjustable speed provides gentle or vigorous mixing action.
- Adjustable angled carousel offers various mixing angles.
- Three Carousel options provide greater versatility for most tube mixing needs.
- AC Adapter is UL, CSA, and CE approved
- 2 Year warranty

- **Speed range**Variable 4 to 18 rpm

- **Carousel angle**Variable

Carousel Capacity	Re-order Number
36 x 1.5/2.0 ml Tubes	260751
10 x 10/15ml Tubes and 16 x 5/7 ml Tubes	260752
6 x 50 ml Tubes	260753

- **Carousel Load Capacity**.....0.8 Kg (1.75lbs)

- **Dimensions (W x D x H)**.....22.9 cm x 12.7 cm x 15.24 cm (9 in. x 5 in. x 6 in.)

- **Weight**.....2 kg (4.5 lbs)

- **Power**.....12 Volt DC, 1.0A via 100/240 Volt AC Adaptor

6. Warranty and Service

6.1 Warranty

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

Boekel Scientific's warranty provided here under shall be null and void and without further force or effect if there is any : (1) repair made to the product by a party other than Boekel Scientific, or its authorized service representative. (2) Misuse (including use inconsistent with written operating instructions for the product), mishandling, contamination, overheating, modifications or alteration of the product by any customer or third party. 3) Use of replacement parts that are obtained from a party who is not an authorized distributor of Boekel Scientific.

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. Contact Boekel 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.

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