



**Operations Manual**  
**Item: H3D1020**  
**V1.0**

**Mini BioMixer™**  
**3D (Nutating) Rockers**



**Introduction:**

Benchmark's Mini BioMixer™ is a nutating mixers with the angle and speed set for gentle, but thorough, no/low foam tube mixing and other nutating mixer applications. The Mixer comes with an ample mini sized (6" x 8") platform designed to fit inside the myTemp™ mini incubator.

**I. Specifications:**

**Speed:** Fixed: 24rpm (20 rpm for 230 volt models)  
**Tilt angle:** +/- 20 degrees from the horizontal  
**Motor:** Long life AC gear motor  
(no DC motor carbon brushes to replace)  
**Platforms:** 15.25 x 20.25 cm (6 x 8")  
**Mat:** Flat & Dimpled, autoclavable  
**Load Capacity:** 1.6kg (3.5 lb) centered and balanced  
**Dimensions:** 20.3 x 15.25 x 20.3 cm (8 x 6 x 8 in.)  
**Weight:** 2kg, 4.4lbs / 1.7kg, 3.8lbs  
**Electrical:**  
115VAC, 60Hz, 0.4 A (B3D1320 and B3D1020)  
230VAC, 50Hz, 0.2 A (B3D1320-230 & B3D1020-230)  
**Operating environment:** 4°C to 65°C  
**Warranty:** 2 years

**II. Product Set-Up:**

To install the Mini 3D shaker first remove the drip tray from the base of the mini incubator (see figure A.). Then install the shaker in the center of the incubator (the shaker should be placed on the floor of the incubator, not on any shelves.)

Once the shaker has been centered inside of the incubator, take the flat power cord and bend it at a 90° angle across the bottom left corner of the incubator as shown in figure B.

The door can now be closed by pressing firmly on the door handle (see figure C.)



Figure A.



Figure B.



Figure C.

**III. Product Operation:**

Load the platform from the center out, making sure the items placed on the platform form a balanced load around the center of the platform. This is important as larger, overhung loads may cause the rocker to stall or tip. Turn the unit on by activating the ON/OFF switch so that it is illuminated. The rotator will begin to rotate.

**IV. Care and Maintenance:**

No routine maintenance is required other than that to keep the unit clean. Cleaning can be done with a damp cloth. Avoid the use of solvents as they may attack the rubber mat of plastic (ABS) housing.

**Service and Contact:**

In the event that service or technical support is required, please contact **Benchmark** by phone at **1-908-769-5555** or by email at [info@benchmarkscientific.com](mailto:info@benchmarkscientific.com).

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