



MiniMixer™ and BioMixer™ Nutating Shakers Models B3D1020 and B3D1320 Instruction Manual

Benchmark's MiniMixer™ and BioMixer™ are nutating mixers with their angle and speed set for gentle, but thorough, no/low foam tube mixing and other nutating mixer applications. The MiniMixer™ comes with an ample 27.1 x 19.6 cm (10.5" x 7.5") platform and the BioMixer™ comes with a larger 30.0 x 30.0 cm (12" x 12") platform. Both are supplied with dimpled rubber mats to hold tubes. These models make excellent general purpose lab rotators with a full 1.6kg (3.5 lb) load capacity. The MiniMixer™ and BioMixer™ will operate in cold rooms down to 4°C and in incubators up to 65°C.

I. Product Specifications:

Speed: fixed at 24 rpm (20 rpm for the 230 volt model)

Tilt angle: +/- 20 degrees from the horizontal

Motor: Long life AC gear motor (no DC motor carbon brushes to replace)

Platforms: MiniMixer™: 26.7x19.1 cm (10.5"x7.5") with 3 tie down points on each side

BioMixer™: 30.0x30.0 cm (12"x12") with 3 tie down points on each side

Mat: Dimpled, black, autoclavable

Load Capacity: 1.6kg (3.5lbs) centered and balanced on the platform

Dimensions: MiniMixer™:(wxdxh): 26.7x19.1x20.3 cm (10.5x7.5x8.0") Weight: 1.7kg (3.8lbs)

BioMixer™: (wxdxh): 30.0x30.0x21.1 cm (11.8x11.8x8.3") Weight: 2.0kg (4.4lbs)

Electrical: 115VAC, 60Hz, 0.4 amps (Model B3D1020)

230VAC, 50Hz, 0.2 amps (Model B3D1020-230) CE compliant

Operating environment: 4°C (cold room) to 65°C (incubator)

Warranty: 2 years

II. Product Set-Up:

Place the nutator on a clean, flat, stable surface. Make sure that the power switch is in the OFF (not illuminated) position. Plug the rotator into a properly grounded outlet. Check that nothing blocks the up-down rotating action of the platform.

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 large, overhung loads may cause the rotator 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 to keep the unit clean. Cleaning can be done with damp cloth. Avoid the use of solvents as they may attack the mat or ABS plastic housing.

V. Accessories: Stacking Platforms, Mats and Tie Downs:

An optional stacking platform accessory is available that allows doubling of the mixer's working area. There are 7.0 cm (2.8") of separation between the two platforms allowing access to both, trays and tubes. The stacking platform comes with a dimpled mat. Additional dimpled and flat mats and elastic tie downs to hold tubes in place are also available.