



Operations Manual Item: B3D5000 (-E)

BenchWaver™ 3D (Nutating) Rocker



Introduction:

Benchmark's BenchWaver™ is a quiet, high capacity, 3-Dimensional rocker with adjustable speed and tilt. The BenchWaver™ 3D produces a unique simultaneous rocking and rotating action that is ideal for blot washing, gel staining/de-staining and hybridization applications. At higher speeds, the instrument produces a vigorous gyratory action that is excellent for mixing sample tubes of all sizes.

I. Specifications:

Speed: Adjustable from 5 rpm to 105 rpm
Tilt angle: Adjustable from 0 to +/-10 degrees
Platform: 34 x 33 cm (13.5" x 13")
Load Capacity: 9 kg (20 lbs.) centered & balanced
Dimensions: wxdxh 33 x 34 x 24.75 cm (13.5x13x9.75")
Weight: 12 lbs. / 5.5 kg
Mat: Flat, non-skid, black, autoclavable
Electrical: 100 to 240 VAC, 50-60Hz, X Watts
Operating environment: 2°C (cold room) to 60°C
Warranty: 2 years

II. Product Set-Up:

Place the instrument on a flat and stable surface. Make sure that the power switch is in the OFF position. Plug the instrument into a properly grounded outlet.

Always ensure that there is at least two inches of clearance space on all sides of (and above) the platform.

III. Product Operation:

Load the platform from the center out, making sure the items placed on the platform create a balanced load around the center line of the platform. This is important as large, overhung loads may reduce the life-span of the instrument. Turn the unit on by pressing the ON/OFF switch. The display illuminates.

To set the mixing speed, press the "Speed/Time" button until the arrow is pointing to "SPEED" on the display. Then use the up and down keys to set the desired mixing speed.

To set the run time, press the "Speed/Time" button until the arrow is next to "TIME" on the display. Then use the up and down keys to set the desired run time.

IV. Tilt Angle Adjustment

The tilt angle can be easily adjusted without the use of tools. Before adjusting the tilt, ensure that the instrument is powered off and that any samples have been removed from the platform.

To increase the tilt angle, pull the black knob beneath the center of the platform. While pulling the black knob, press the center of the platform downward so that the steel, rectangular block moves downward. When the desired tilt level is reached, release the black knob so that the pin inserts into one of the holes in the steel rectangular block.

To lessen the tilt angle, pull the black knob beneath the center of the platform. While pulling the black knob, pull the center of the platform upward so that the steel, rectangular block moves upward. When the desired tilt level is reached, release the black knob so that the pin inserts into one of the holes in the steel rectangular block.

V. Accessories, stacking platforms & mats:

Stacking platforms are available (Item: B3D5000-STACK) that allow doubling of the work area. There is a 7.5 cm (3") separation between the two platforms, allowing access to the content of both trays. The stacking platform comes with a flat mat. Additionally, a dimpled mat is also available Item: B3D5000-DIMP).

VI. Care and Maintenance:

No routine maintenance is required other than to keep the unit clean. Cleaning can be done with a damp cloth. Avoid the use of solvents as they may damage the product 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.