

digital vortex mixer with adjustable speed and time

The digital vortex mixer is driven by a DC brushless motor and combined with electronic control technology, which makes the device not only have mixing performance, but also provide precise speed and time regulation.

Digital Vortex Mixer

Main Features

1. Accurate LED display: Separate display shows real-time mixing speed and time—easy monitoring and precise control.
2. Three operation modes: Touch, timing, and continuous—select the best mode for your experiment.
3. Dynamic balance design: Sturdy metal base and balance system suppress vibration—prevents displacement and experimental errors.
4. Interchangeable accessories: Compatible with test tubes, flasks, beakers, microplates—supports diverse mixing needs.
5. Brushless motor drive: DC brushless motor—precise speed control, maintenance-free, long service life.
6. High safety: 12V low voltage operation—protects laboratory environment and user safety.



7. Wide speed range: Adjustable from 0–3000rpm—adapts to varied liquid mixing requirements.

Advantages

1. High stability: Metal base and balance design eliminate vibration—ensures reliable, accurate results.
2. Multi-functionality: Multiple modes and accessories—flexible for different container types and protocols.
3. Strong safety: Low voltage and brushless motor—no safety hazards during operation.
4. High efficiency: Precise speed and timing settings—improve experiment throughput and reproducibility.

Working Principle

The mixer generates vortex-type vibration via a DC brushless motor-driven oscillating head or tray. Vibration frequency and intensity are adjustable by rotary dial and shown on LED display, allowing precise speed and time control. Metal base and dynamic balancing eliminate unwanted movement, ensuring smooth and stable operation.

Application Areas

1. Life sciences & biology: Mixing cell culture solutions, serum, enzyme reactions—ensures sample homogeneity and reaction completeness.
2. Chemistry labs: Mixing reagents, solutions, reactants—ideal for pre-treatment in precise chemical reactions.
3. Medical/biomedical analysis: Mixing blood, drug solutions, biochemical samples—ensures accuracy of analysis.
4. Environmental science: Water and soil sample mixing—quickly and evenly blend experimental samples.

5. Pharma & chemical industry: Drug development, reagent preparation—accurate mixing for consistent product quality.

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Model	BV50
Speed range	200 to 3000rpm
Orbit	3.5mm
Timer	1 second to 999 minutes
Capacity	2 x microplates, 12x15ml, 2x50ml, 12x5ml, 12x8ml, 12x8x0.2ml
Operating modes	touch or continuous
Power supply	240Vac 50Hz or 110Vac, 60Hz, 0.75A
Dimensions	228x135x550mm
Weight	4.0kg