6.INCUBATOR SHAKER

Amerex Instruments Gyromax 747R
Refrigerated Orbital Incubator Shaker

The GYROMAX 747R Orbital Incubator Shaker is designed to accommodate as many clamps of a given size as that in a chest-type shaker, but have the advantage of accommodating
shelves for incubation and the stacking of two units to save space. The double-walled construction, with 1.25" of insulation and a triple-paned, evacuated viewing glass window, minimizes heat loss. This construction, together with an efficient circulation system, ensures unrivaled optimum temperature uniformity throughout the chamber.

The temperature is microprocessor controlled and is monitored accurately by a Pt-100 RTD. It is set digitally and reproducibly from a membrane keypad and displayed by an LED to within 0.1oC. The working temperature is from 4oC to 80oC.
Independent high and low limit thermostats protect the chamber from overheating and overcooling. The timer is programmable for up to 99 hours or for continuous operation.

A large, quiet fan ensures air and temperature uniformity throughout the stainless steel chamber. A brushless, maintenance-free drive motor generates speeds from 25 to 400 RPM that is displayed digitally. At the same RPM, the standard shaking orbit of 25 mm provides a higher oxygen transfer rate (OTR) compared with shakers with a 19 mm orbit because OTR is directly proportional to orbit size. The motor incorporates a built-in fan that lowers its operating temperature and thereby prolongs its life. A triple-eccentric drive with counter-balancing weights provides smooth and quiet shaking without the need for adjustments as the load changes. The shaking stops when the door is opened. The chamber lamp is turned on and off with a switch on the control panel. The 26” x 21” platform can accommodate Erlenmeyer flasks up to 6 liters.

Optional accessories include: platforms, clamps, spring racks, tube racks, plate holders, and a 30-port gassing manifold that permits direct gassing into flasks or other vessels. Platform holes are drilled to accommodate the different clamps purchased. The spring rack is designed for holding tubes in a horizontal, angled, or upright position. It can also be used to hold flasks up to 1-liter without clamps. The rack consists of a 2-tier grid of springs. The distance between spring racks is adjustable to accommodate tubes and flasks of different heights. They are mounted onto the platform by four screws.

MODEL	747R
TEMPERATURE	
Range w/ refrigeration	4°C to 80°C for models with R designation
Accuracy	±0.1°C
Uniformity	±0.5°C at 37°C
Setting	From a soft-touch membrane keypad
Control	Auto-tune microprocessor PID controller
Display	Digital LED readout to 0.1°C
SHAKING	
Range (at 60 Hz)	20 to 400 rpm (slightly lower at 50 Hz)
Display	Digital
Orbit	1"/25mm (larger orbits available)
Timer	99 hours and 59 minutes in 1 minute increments, or for continuous operation
STACKABILITY	Yes
SHELF	Yes
MOTOR	Maintenance-free, brushless motor
HEATER (watts)	700
REFRIGERATION	No/0.33hp
CHAMBER MATERIAL	Stainless steel
DIMENSIONS	
Overall Width (in,cm)	39.5,100
Overall Depth (in,cm)	28,71
Overall Height (in,cm)	33,83/40,101
Chamber Height (in,cm)	24,60
Platform Width (in,cm)	26,66

Platform Depth (in,cm)	21,53
WEIGHT	
Net (lb, kg)	410
Shipping (lb, kg)	565
POWER REQUIREMENT	
Voltage, Frequency	120V or 220/240V, 50/60Hz
Wattage (V x A)	900/1500

FLASK CAPACITY

Flask Size (mL)	**25**	**50**	**125**	**250**	**500**	**1000**	**2000**	**2800**	**4000**	**6000**
Model 747/747R	144	112	63	42	30	15	12	6	6	4

Vortex Mixer

Press and move to zoom.

VORTEXER | VORTEX MIXER

Product Code:120209

Vortexer ¦ Vortex Mixer
Multi-purpose, maximum convenience

This sleek and modern designed vortex mixer is capable of meeting the mixing requirements of the most popular test tubes used in today's lab without the need to swap out mixing head units.

The innovative design of the vortex machine makes maximum use of the space available, providing holding slots for no less than six different sizes of tube and a standard assay plate, while the center pad area can be used for quick hand-held mixing of a vast range of tubes and vessels.

- Body made from durable ABS to resist most commonly used chemicals, and is easy to clean
- Fixed variable speed rotary dial provides pre-set speed control (1000, 2000, 3000 rpm) during shaking mode
- Stable elastomeric device feet, provide vibration dampening and prevent movement during operation
- Innovative head can be removed for cleaning purposes

- 3 Position Slider (top) intermittent, (middle) off, (bottom) continuous
- US Design Patent No. D787,085
  US Utility Patent No. 9895670

Specifications
Speed Range: Pre-set 1000, 2000 and 3000 rpm (shaking to vortexing)
Orbit: 3.7 mm
Control: 3 position slider —(top) intermittent, (middle) off, (bottom) continuous
Weight: 8.7 Lb/3.9 Kg
Dimensions: 6.7 W x 7.5 D x 7.8 H in (17.1 x 19 x 19.7 cm) (with mixing head in place)
SGS-US-C, CE, CB Scheme, RoHS 2, PSE, and WEEE compliant
Two year warranty

Mixing Head Holding Capacity
- Center pad area for hand held mixing
- Assay plate x 1 (to be used with retention cords)
- 50 mL conical tubes x 2 (horizontally mounted)
- 15 mL conical tubes x 2 (horizontally mounted)
- 5 mL tubes x 2 (horizontally mounted in the same retention space as 15 mL)
- 1.5/2 mL microfuge tubes x 4 (vertically mounted)
- 0.5 mL microfuge tubes x 6 (vertically mounted)
- 0.2 mL microfuge tubes (strip tubes) x 24 (vertically mounted)